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JUHTIMISSÜSTEEMI ROLL KORPORATIIVSES ORGANISATSIOONIS, ETTEVÕTTES, FUNKTSIONAALSE TASEMEGA STRATEEGIATES- FLOUR MILLS NIGERIA PLC JUHTUMIANALÜÜS

THE ROLE OF MANAGEMENT CONTROL SYSTEM IN AN ORGANIZATIONS' CORPORATE, BUSINESS AND FUNCTIONAL LEVELS STRATEGIES – A CASE STUDY OF FLOUR MILLS NIGERIAN PLC

Master's thesis
Curriculum in Agric-food Business Management

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Kokkuvõte

Seni ei ole ettevõtte-, äri- ja funktsionaalsele tasemele jäävates strateegiates juhtimiskontrollisusteem kasutamisele võtmisele kas täheleanu pööratud või on tehtud seda ebapiisavalt. Antud asjaolu on põhjustanud juhtimisstrateegia kehva rakendumise ning tegevuste ebaefektiivsuse. Antud uuringu eesmärgiks oli pakkuda empiirilisi tõendeid toetamaks juhtimiskontrollisüsteemide hüpoteetilist seost toidu tootmise ja põllumajanduse valdkonnas tegutseva ettevõtte Four Mills Nigeria Plc äri- ning funktsionaalsel tasandil toimivate strateegiatega. Uuringu läbiviimisel kasutati kvantitatiivset uurimismeetodit ja küsimustikke. Antud töös püstitatud hüpoteesi kontrollimiseks kasutati logistilise regressiooni ja statistilise korrelatsiooni mudeleid ning kasutati sotsiaalteadustele suunatud statistikapaketti (SPSS). Uuringu tulemusel selgus, et juhtimiskontrollisüsteem mõjutab märkimisväärselt Flour Mills Nigeria Plc korporatiivset, äri- ja funktsionaalset juhtimise taset. Selle põhjuseks on ettevõtte keskendumine normidele ja väärtustele, konkurentsipositsiooni järjepidevuse tagamisele turul ning juhtkonna kavandatud asjakohastele tegevuskavadele korporatiivsel, äri- ja funktsionaalsel tasandil. Antut töös on jõutud järeldusele, et juhtimiskontrollisüsteemi rakendamine on oluline positiivsete tulemuste saavutamiseks ettevõtte Four Mills Nigeria Plc korporatiivsete, äri ning funktsionaalsete strateegiate rakendamisel.Uuringus soovitati ettevõttel Four Mills Nigeria Plc rakendada juhtimiskontrollisüsteemi tõhusa kommunikatsiooni toimimise tagamiseks, töötajatele täiendavate soodustuste süsteemi ja autonoomsete töökohtade loomiseks, aga samuti inim- ja materiaalsete ressursside tõhusama rakendamise tagamiseks. Samuti soovitati juhtimiskontrollisüsteemi juuutada suunatult tööprotsesside automatiseerimisele, uute tehnoloogiate väljatöötamisele ning usalduslike ja kauakestvate kliendisuhete loomisele

Märksõnad: Haldus, järelevalve, struktuur, töötaja, Lagos

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Abstract of Master's Thesis

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Abstract:

Until now, little or no attention has been paid to the use of management control system (MCS) in an organisations' corporate, business, and functional level strategies, thereby given rise to poor strategy implementation and operational inefficiency. The purpose of this study was to provide empirical evidence to support the hypothetical relationship between the management control systems and corporate, business, functional level strategies of Four Mills Nigeria Plc, a food and agriculture business industry. This study employed a quantitative study approach and questionnaires. The hypothesis designed for this study was achieved with logistics regression and correlation statistical models, using statistical package for social sciences, SPSS. The study findings revealed that the management control system significantly impacts on Flour Mills Nigeria Plc corporate, business, and functional levels. This is as a result of the company's focus on norms and values, the consistency and adherence to the competitive position in the market, and appropriate management designed action plans, at corporate, business, and functional level respectively. It is concluded that the management control system is significant for achieving positive performance on corporate, business, and functional strategies of FMN Plc. The study recommended that FMN Plc should implement an MCS structure to ensures effective communication, support for the employees' fringe benefit, Job autonomy, Implement MCS to align with human and materials resources for better performance, Implement MCS that is driven by automation, development of new technologies, and with deeper, and long-lasting customer relationships

Key words: Administrative, supervise, structure, operative, Lagos

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This research study is the fruitful result of studying the role of management control system in FMN Plc corporate, business and functional levels strategies, and it concludes my Master studies in Agric-food business management at Estonia University of Life Sciences, Tartu, Sometimes in my second semester after several and intense class activities in management subjects, I was convinced that to conduct a research in management control system with a case study company from agricultural food industry in Nigeria should be valuable for practitioners and scholars in the agric-food business and management activities. With this on my mind, I decided to contact some organisations I know that would immensely be of great help in producing fruitful effort which will represent a good outcome to this research studies. Then I contact FMN Plc management staff and I was provided with the opportunity to carry out my research in this organisation. I received all the necessary support that helped to the successful completion of my research studies.I am most grateful even at this challenging period you all attended to my questionnaire and requests.Without them my research activities and result from this study would not have been easy. Their effort gave me great inspiration, opportunity and this have contributed greatly to my academic achievement.

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TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

Figures

Tables

LIST OF ABBREVIATIONS AND OPERATIONAL TERMS

The following are the terms used in this work and their explanations which will help in better understanding of this thesis:

Abbreviations	
BS	Business strategy
CBN	Central bank of Nigeria
CEO	Chief executive officer
CS	Corporate strategy
EVA	Economic value added
FS	Functional strategy
FMN	Foul Mills Nigeria Plc
MBO	Management by objective
MCS	Management control system.
SPSS	Statistical package of social sciences
TQM	Total quality management
Operational terms	
Business strategy level	Strategic level that involves a coordinated and integrated set of actions which an organization adopts to gain competitive advantage
Clan control	Establishing values and belief through ceremonies and ritual of the society
Control	Concept used in monitoring a planned implementation and taking corrective action
Conceptualize	To form an idea
Corporate strategy level	Strategic level that involves the top management approach or road map for the administration and directing an entire organization
Cybernetic	Self-regulating system using feedback loop

Ex-ante control	It is the performance measurement process before the organisation operation activity begins
Functional strategy level	Strategic level that involves the goals and actions expected to be performed by the component departments of an organization
Management	Process an organization employs in dealing with and controlling human and materials resources
Strategy	This is an action plan designed to achieve a goal
Symbol-base control	Control through visual expression
System	Tools and approach used to define work process to achieve consistency and quality in operation activities
Transactional change	term used for constructive changes in project requirement and activities
Transformational change	A change from contemporary to modern method

CHAPTER ONE

INTRODUCTION

1.1. Background of the study

The degree of competition in the contemporary business environment and the need to utilize the financial and human resources in an organization to achieve competitive advantage has increased the debate on the concept of management control systems (Chiapello et al, 2001:1).Through management control systems organizations' aims to adopt combine perspectives in tackling the challenges facing their processes of operations. Merchant and Van (2007:11) argued that the purpose of establishing management control systems is for the managers to determine how the workforce can be influenced into acting desirably to achieve the objectives of the organization.

MCS describes a process of practice and how information gathering and evaluation are used to access operation performance in organizations using human, physical, and financial resources as the tools in the process. Through this, the objectives and goals of a business entity are communicated to managers, and thus it ensures that everyone works towards attaining the organization standard effectively. Organizations adopt a control system so as to watch and be guided on its performance levels. The adoption of the practices often aims at achieving a comprehensive system and framework crafted to control and monitor internal aspects of a business as well as the external behavior and environment.

According to Kimura and Mourdoukoutas (2000:43) and Kloot (1997:50) management control system (MCS) is focused on the effective improvement of the operations and efficient utilization of the resources in executing the strategies for maximum performance. For an organization to achieve an effective MCS, it should be designed in line with the prevailing

business environment and linked to the demands of the organization. Bessire and Baker (2005:659) noted that the strength of MCS lies in its inter-meditative role in different issues and in its function to communicate the collective future and current actions in the entire organization. Merchant and Otley (2007) state in basic terms, MCS provides the relevant information required for effective decision making, planning, supervision, and evaluation of an organization's performance by influencing employee's behavior to the organizational goals.

Literature has revealed that MCS serves as a tool for the execution of the corporate, business, and functional strategies of an organization (Hax and Majluf, 2006). These authors argued that the strategies are differentiated from each other based on the type of decision taken at their respective levels, as a result of the different features of the units and the type of managers that participates in each level of decision-making and the implementation of the strategy. They noted that corporate level strategy has the widest scope in the organization and cannot be delegated to a subordinate for decisions or actions.

Also, Kent and Mikael (2004) submitted that corporate strategy involves the company's goal and objectives, the decisions on the business environment, market and product choices of the organization which can be synonymous with the portfolio decision in the inventory theory. The business level strategies involve taking and executing the critical decisions which increases the economic returns from the operations and sustain the competitive advantage of the organization (Hax and Majluf, 2006). Kent and Mikael (2004) had earlier submitted that business strategy is specific and more focused and states how the organization will utilize its scarce resources in particular market condition or product area to maximize profit. Hax and Majluf (2006); Kent and Mikael (2004) opined that the functional level involves the core competencies and capability which the organization utilizes as an edge over its competitors.

The functional level strategy defines how a specific function should meet the desired goal, such as how to meet the quantity and quality specification by organizing the production process. Simons (2000) argued that management control systems can be classified into diagnostic control systems, interactive control systems, boundary systems, and belief systems. While the belief and boundary system is adopted in framing the strategic choice, the

diagnostic control systems and the interactive control systems are used in the performance management systems for the purposes of elaboration of a strategy, implementing the strategy, and the feedback process (Bisbe and Otley, 2004).

Scholars such as Bruining et al., (2004) and Kober et al., (2007) noted that the management control system plays a crucial role in the design and the implementation of the strategies of an organization. Simons (1990) had earlier identified that management control systems involve a firm's budgetary practices, management accounting system, organizational planning system, performance measurement and project management system, and reporting system. While Acquaah (2013) and Moilanen (2008) described the use and instrumentation of the MCS variation from one organization to another because of different types of ownership, structure , and different business environments they operate. This determines the level it could be adopted as a priority tool in the decision-making and how it will be applied as a control measure in comparing what is planned compared with the output, and in establishing deviations as well as the actions that will address the identified deviation to the set limit (Moilanen, 2008).

The increasing competition in the business world occasioned by the effect of modern technology and globalization demands constant review of the strategies and the MCS in line with the realities in the business world (Kent and Mikael, 2004). The changes influence companies to shift their strategic direction by the use of up-to-date information in the planning, control, and decision-making process of the corporate, business and functional strategies. The MCS goal is to ensure that the goals set in the respective strategies are achieved. Through the inter-meditative role, it ensures that the strategies consider the vision, mission and business ideal of the company and how the objectives can be achieved by influencing the employees responsible for decisions and activities at the corporate, business, and functional level of the firm.

Essentially, MCS gives direction in which an organization should go and uses the operation controls to provide the management to perform the functions which are outlined and adopt a standard for an organization's goals achievements. Thus an organization fails when there is a

lack of proper management control system in place management control. This is because this system acts as checks and balances to a company guiding principles which management teams must act on; Problems can be found, A strategy can be planned, and better coordination is ensured and planned amongst the different departments and units - It makes functions of management easier.

1.2. Case study company - Flour Mills Nigeria Plc

Flour Mills Nigeria Plc is a private business organization incorporated in Lagos Nigeria in September 1960 as an agro-allied company by George Stravos Coumantaros. In 1978, the company became a public limited company with its share listed in the Nigeria stock exchange. The company located in a densely populated area with over 20 million population, in Lagos, Nigeria, Africa, has millions of customers who cannot stop patronizing their product due to everyday innovative and creative food product that meets the consumer's demand and desired satisfactions.

FMN Plc engaged in manufacturing food products, logistics, and support services. The company products are refined sugar, edible oil, pasta and noodles, cassava, maize, oil palm, bags, etc. The company's production capacity shows that it produces 3million metric tons of its various products per year through its subsidiaries and with about 11,000 employees (Africa) in its workforce teaming together to see that this result remains and increases yearly. Amongst this workforce is competent men and women across ethnic nationalities, age, countries, and race.

The company adopted a business strategy that placed them at a premium level as the market leader in the food industry in Nigeria and Africa. Using customized business intelligence tools and modern business equipment in its operations to always meet the trend of business as required by their customers and consumers. The organization groups engage and encourage support and informal training of farmers. They support farmer finance, farm seedlings, crop to cooperative farmers, individual business farm owners and also go into partnership with them. This has helped the company increase its increase in financial performance.

The year 2021 financial report showed that the company gross profit increase from 31.8 in 19/20 to 50.3 in 20/21 showing a 58%, increase while operating expenses increased from 15billion it was in the previous year to 17.4 billion in 20/21 also indication a 16% increase. This is a good result but there lies a challenge for better improvement in areas like implementing of policy in effective communication and structure towards performance, aligning human and material resources to organization's goals and support fringe benefit to the employee is a threat to the company.

Evaluation and assessment of the company policy shows that there is less commitment of the management towards improvement in these areas. As a result, FMN Plc's vision and mission is drifted away from the bedrock of its set strategies and therefore failing to dominate the food business market so as to thrive and achieve its desired set goals. Hence FMN leveraging on their corporate, business, and functional strategies and policies to adapt, exploit, and fit with the forces in their external environments to organize and structure internally to meet the demands and opportunities in the market will increase productivity potentials. For better understanding of FMN Plc in Lagos state, Nigeria, see figure 1.1.

Figure 1.1 Map showing location of the case study company. Source:https://www.fmnplc.com

1.3. Statement of research problem

The rising demands in food products, agro-allied, and support service in the market industry as a result of a new trend in production, technology, service delivery has necessitated a change in

FMN Plc service approach. The company's competitors are already utilizing these great opportunities for market success. From the industry report, 20% of the industry market share is controlled by a company considered not engaged in high-quality services as FMN Plc does. According to Grant (1991) organizations contend with financial, physical, human resource, technological and reputational challenges which demand the available scarce resources at both corporate, business, and functional levels.

As business environments become more dynamic, FMN Plc aims to design its policies to suit the changing environment. These changes are not reflected in the product and services characteristics of the organization and how this change will satisfy the market demands at a profit to the firm. While this prevails, little or no attention is paid to the use of internal mechanisms such as management control systems to achieve the organizational goal at corporate, business, and functional levels by influencing the employees and effective resources utilization through specific practices. Therefore there is a need to take an evaluation of factors considered in the policy making, plans, and activities designed towards business goals accomplishments, how are material resources being used to creating values on CS, BS, and FS. Chae et al. (2014) noted that the differential in the performance of firms enables the performing firm to deliver higher value at a given cost.

For an organization to survive in the current competitive environment, it should make a substantial allocation of financial resources and deploy competent and capable human resources that will help in formulating and implementing the strategies aimed at achieving the organization’s goal as required by the theory of resource-based view. Therefore, both physical and abstract concepts such as management control systems have to be implemented to justify the investments made in the acquisition of the resources. In most cases, during evaluation, appraisals are mostly carried out on the physical activities such as product development and product delivery to ascertain their contribution to the performance of the organization, while little or no attention is paid to abstract concepts like management control systems. Consequently, this led to outlining the research questions for studying MCS at FMN Plc corporate, business and functional levels strategies.

1.4. Research questions

1. Do MCS have effect on corporate level strategy of Flour Mills Nigeria Plc?

2. Does MCS have effect on business level strategy of Floor Mills Nigeria Plc?

3. Does MCS have effect on functional level strategy of Floor Mills Nigeria Plc?

1.5. Research gap

Studies revealed in the case study company that:

1. No structural or formal studies were carried out towards ascertaining the level of management controls system practices both at corporate, business and functional levels in the most recent time;

2. There is no researcher or author that could be narrow down to have conducted a research of MCS at corporate, business and functional levels;

3. Hence there is no formal documentations that covers research carried out on MCS at corporate, business and functional levels;

4. Even though it could be identified that the case study company follows the guiding practices of MCS in its corporate, business and functional activities, the context and formal practices of MCS concepts on these levels for corporate policies are still in need to of attention.

A good number of good pieces of literature have discussed the impact of strategy on the MCS while little attention has been paid to the influence of MCS on strategy (Henry 2006; Darja and Metka 2008). This calls for the need to carry out more robust investigations that will reveal the influence of MCS practices at the corporate, business, and functional levels of an

organization. This study also aims to bridge the literature gap as little works have been written on the research topic. This will widen the number of material available for researchers and students in their further study on the topic.

1.6. Research aims and objectives

The general aim of this work is to identify the role of management control systems in the corporate, business, and functional levels of Flour Mill Nigeria plc. The specific objectives are:

1. To identify and critically evaluate the roles of management control system on the Corporate level strategy between Januarys, 2017 to April 2021;

2. To identify and critically evaluate the roles of management control systems on the business level strategy between January 2017 to April 2021;

3. To identify and critically evaluate the role of management control systems on the functional level strategy between January 2017 to April 2021.

1.7. Research methodology

The method adopted in carrying this research is the quantitative method and a structured questionnaire. It is a carefully designed and articulated structured questionnaire inform of Likert scale, and the responses are put between scale 1 -5, the scale 1 being the lowest score and scale 5 being the highest score. The questionnaire was given to the case study company employee to answer. The responses collected from this questionnaire represented the primary data and were used in regression and correlation statistical analysis respectively using SPSS to test for the level of significance and relationship of these variables.

1.8. Reference style

The reference adopted for siting the authors view and quotes in this research is America Psychological Association (APA).

1.9. Significance for the study

The importance of a management control system in the performance of an organization cannot be overemphasized because of its ability to align humans and materials to the goal of the organization and influence the workforce on the objective of the organization for better performance. Through this study,the company used in this study as a case study will be investigated to know the impacts of management control systems on the corporate, functional, and business strategy of the organization, and the findings will service as a guide in designing a better MCS structure that will work effectively based on the prevailing business conditions and environment for competitive performance. This study is also justified by its contribution to literature which bridges the gap created by the scarcity of scholarly works on the topic. Through this, the students will benefit from the knowledge contained in the work and improve on their careers. Researchers will also be provided with literature material with rich content that will help in further studies on the topic, while organizations benefit from the work through the information provided for better practice of management control systems in the organization.

1.10. Scope of the study

The study is carried out on Flour Mills Nigeria Plc by April 30, 2021. The company is located at 1 Golden Penny Place, Wharf Road, Apapa Lagos State Nigeria. The participants to the study will be the managers and other employees of the corporation who are currently working in the organization. Both are from different genders.

1.11. The relevance of the topic to agric-food business management

Agric-food Business Management is a study program that uses theories and practical skills in making students understand the food market, management of agricultural and food businesses. Therefore, the relevance of this research studies will enable students, professionals, and scholars to understand the better practice of agricultural management and improve on the integration of practices at different component levels and strategies, and in turn, offer higher outcome from the activities of the case study company. The study is also relevant to the Agric-food Business Management program and other related fields of study because it will contribute to the literature available for studies.

1.12. Contribution to knowledge

The study will contribute to available studies carried out on the topic and widen the existing knowledge on the role of MCS to the corporate, functional and business levels in an organization even as the knowledge and understanding are gained from Flour Mills Nigeria Plc.

1.13. Structure of the thesis

This thesis is divided and written into chapters (1 to 6) and content structure is adopted in the discussion of the relevant sections of the study. Chapter one is the introductory part of the work, chapter two contains the literature review. While chapter three highlight the development of the research hypothesis, chapter four discussed the materials and methodology adopted for the study. Chapter five discussed the data analysis and result and chapter six comprises the discussion, conclusion, recommendations, and limitations.

CHAPTER TWO

LITERATURE REVIEW

2.1. The definition and concept of management control system

The growing popularity of the term management control system (MCS) has raised authors concern to having different views in the definition and concept of this organisational internal mechanism. This prompted different scientific researches from authors, scholars and academia to finding the appropriate subject definition and practical examinations. According to Fisher (1998), some find it challenging, and for (Langfield-Smith, 1997; Alvesson & Karreman, 2004; Merchant & Van der, 2007), some have different perspective. According to Merchant and Van der Stede (2007) management control are separated from strategic control. He defined management control in the context of employees' behavior. In his word, people in the business organisation stimulates activities in an organisation. Management controls process are essential guard towards the possibilities that people will do something the organization want them to do against what the organisation does not want them to do.

In the view of Anthony (1965) this concept definition was given as the process of managing and certifying the gained and utilized resources effectively and efficiently in achieving the firm's goals. Also, the enormous performance seen in organizational achievement is caused by equal contribution to the organization's business environment, strategy, internal structures, and systems (Goyindaran, 1988).In the trending and modern business environment (competitive, multifaceted, and mutable engagements) firms need to implement business models that can assist them in identifying the strategic uncertainties and risks in their confining of business potentials.

While in the word of Henri (2006) MCS is seen as standards that are formalized by using the information to change a concept in organizational activities such as monitoring practices which are dependent upon the information given, planning and reporting systems. According

to Lopez-Valeiras, et al. (2015) these authors applied Chenhall (2003) definition which explained that MCS comprises academic studies such as management accounting in a systematic use in order to obtain certain objectives and also includes further controls.

As this concept evolves authors have come up with different ideas. Such as the meaning given to the concept by Daneels (2002). He pointed out that business environment changes as a result of increasing changes in technology and global demand of goods and services and therefore business institutions should engage in the steady improvement and constant dynamism in its' internal mechanism for effective and efficient operations both in the short and long runs.

2.2. Theoretical framework of the study

The concept of control process in an organization's internal mechanism towards achieving a define purpose such as using management control systems (MCS) as a tool for this purpose is an age-long process ranging about 3 decades (Otley, 1980). The comparison prevailing in the adoption of MCS reveals that MCS is perceived as a set of controls that managers use in their procedural functional roles to steer the organization towards the predetermined goals (Ladislav, 2015).

This study agrees with and will consider the broad model of the prominent 'object of control' framework established by Merchant & Van der (2007). This control framework known as the five typologies reflects the broad scope of controls in the MCS as a package. And these packages are namely planning, cybernetic, reward and compensation, administrative and cultural controls. Teemu & David (2008) explained that this typology is recognized in a broad model of an organization's MCS package and in which many of the individual controls have significant research streams associated with them. Following the sequence of these five typological conceptual frameworks, this study will explore the five types of controls in the typology; planning, cybernetic, reward and compensation, administrative and cultural controls.

2.3. Organizations' internal mechanism and framework

2.3.1. Planning controls

Planning as a means of control is refer to as an ex ante form of control (Flamholtz, Das, & Tsui, 1985). In an organization process and procedure, it's is used to set out goals in functional areas, towards directing effort and behavior. It provides values to be achieved in accordance with the goals and clarifies the level of effort and conduct expected from members of an organization. In addition, planning aid in the coordination of activities through support assistance to the sets of goals across the functional areas of an organization, thereby controlling the activities of groups and individuals to making sure they are in line with anticipated organizational outcomes. In planning, two broad approaches are adopted. The first is action planning, in which the objectives and activities for the immediate future, usually a year period or less, are established. And the other broad approach is long-range planning, which is a strategic means adopted to achieving goals and actions in the medium and long-run terms.

According to Merchant and Van der (2007) planning and budgeting together are the financial result control systems. In strategic planning, management can create strategic projects and other means all of which are effective in guiding persons towards carrying out tasks .

2.3.2. Cybernetic controls

Previous studies have shown that the cybernetic principles have had a long association with the concept of control (Arrow, 1964; Mintzberg, 1979; Strank, 1983). Further understanding was created through the definition of cybernetic control made by Green and Welsh (1988). This author defined cybernetic control as "a process in which a feedback loop is represented by using standards of performance, measuring system performance, comparing that performance to standards, feeding back information about unwanted variances in the systems, and modifying the system's comportment". A cybernetic system exists as an information system or control system depending on how it is used. Thus this system works as an

information and supporting system when managers used the process to detect unwanted variation and also change their process that caused influence on the production activity without any person's involvement.

However, there are four basic cybernetic systems that have been identified in MCS research. These are budgets, financial measures, non-financial, and hybrids that contain both financial and non-financial measures. Most importantly budgeting is central to, and the foundation of MCS in most organizations, and its use is almost universal (Bunce, Fraser, and Woodcock, 1995). This is due to its "ability to weave together all the disparate threads of an organization into a comprehensive plan that serves many different purposes, particularly performance planning and ex-post evaluation of actual performance vis a vis the plan" (Hansen, Otley, and Van der Stede, 2003).

Budgeting as a form of cybernetic means of control focuses on the process of decision making in resource allocation such as financial allocation and emphasis on the arrangement of having acceptable levels of behavior which often evaluate the result against procedures outlined. One of the basic ways of achieving this is by the management attaching responsibilities to subordinates through decisions on monetary measures, decision of how much budget is allocated is considered. It is important to point out that certain financial measures are related to the budgeting process and is usually refer to as narrow and simple for target setting, it is different from performance measurement system which is seen in a broad spectrum, in the control system. A good example is a return on investment and economic value added (EVA).

While those not refer to as financial measures such as material and human resources are evidently becoming an important part of MCS within modern organizations, they are used to ascertain drivers of performance in the level of progress of an organization. According to Ittner and Larcker (1998).they include total quality management. Even as the hybrid performance measurement systems have described financial and non-financial measures as management by objective (MBO), a model that is strategized towards the improvement of a business organization properly by defining goals that are acceptable by management and stakeholders. It is quite becoming more popular and usual norm, for a practicable MCS with

both financial and non-financial performance measures to adopt (Ittner & Larcker, 1998; Kaplan and Norton, 1992).

2.3.3. Reward and compensation controls

Booner and Sprinkle (2002) describe this control process as a measure of motivation that increases the performance of an employee in organizations through attainment and attention in the execution of organizational goals and activities in a more efficient manner. The basis of this process is that it boosts the morale of employees by offering gifts awards etc. Reward systems can be extrinsic and intrinsic (Flamholtz, Das, and Tsui, 1985). Thus author like Booner and Sprinkle (2002) reviewed that financial rewards increase determination and performance by making employees concentrate more on the task. Impact on performance through the effort to the task is divided into three ways: 1) the tasks individuals focus on, known as effort direction, 2) how long individuals devote themselves to the task, known as effort duration and 3) effort intensity, that is the amount of attention individuals devote to the task.

2.3.4. Administrative controls

This system of management control involves 1) coordination of workers' behavior through the organizing of people and team, 2) who take the overall responsibility of the workers and 3) how each responsibility given to the workers must be carried out. For effective delivery of this system, administrative design and structure, governance structure within the business firm, and the procedure and policies are considered for proper functioning.

A firm organizational design is considered a fundamental process since through the structural pattern the organization uses a certain type of alliance it has established for operational purposes (Abernethy & Chua, 1996; Alvesson & Karreman, 2004). According to Flamholtz (1983) organizational structure and control work through effective operation and specialization, by reducing the inconsistency in the system and, in turn, improves the potential expectations. Although different authors have described organizational design to be basic in an

organization's functioning because it is a process managers can change since it is not something that is imposed on them.

However, the governance structure talks about an organization board and what it comprises. The structure describes proper lines of the makeup of this board, authority, and responsibility. (Abernethy & Chua, 1996). Who and who makes up the board is very paramount since mediocre is not expected in that reputable position. The line of authority includes a system established to make sure those overseeing functioning positions coordinate activities across all boards. Thus governance structures are designed to suit an organization's peculiarity.

The use of the standard processes in carrying and regulating tasks is a fundamental approach to specifying the processes and an expectation from worker's behavior within an organization. Such standards process include approaches that are basics in operating procedures and practices Macintosh & Daft (1987) and rules and policies Simons (1987). The standard policies and practices include what Merchant & Van der (2007) refer to as effective procedural checks in activities, i.e. restrictions in attitude, pre activities control and reviews, and individuals being accountable to personal conduct. According to Merchant and Van der Stede's (2007) pre-activity includes controlling basic and mandatory tasks, and this is referred to as administrative checks and supervisions. Thus this classification provides an adequate understanding of administrative tools managers use to control behavior, as compared to the conceptual framework (object of control) used in this study

2.3.5. Cultural controls

In this type of control, value-based controls, symbol-based controls, and clan controls are considered the most specific. In this scenario, culture exists as a context for an organization and at times being beyond the control of managers (Clegg, Kornberger, & Pitsis, 2005), culture is nonetheless a control system when it is used to regulate behavior.

Simons (1995) developed the concept of value controls through what he described as belief systems. The concept clearly established organizational definition in which management

communicates officially and strengthen processes to align systematically so as to provide basic principles, purpose, and path for the organization". These definitions align with the ethics and guidance subordinates are expected to adopt, and mission and vision statements and ideologies of the purpose intended to be practiced.

The belief system impact values on persons and group behavior and this works in three ways. First is when recruitment is done deliberately to target individuals that have particular values that match with those of the organizations. Second is through socialization, individuals could have their values changed to be compatible with those of the organization. And the third is when values are clarified and employees act in agreement with them, even if it does not suit them individually.

The belief system through the embracing of value statement. An organization culture expects its staff to act in accordance with what this institution represents in conduct, policy, and language either by personalizing them in the behavior or because it is expected from them by the organization. Such increases and promote the organization's values and principles. Thus could also be supported by an ideology such as symbol-based controls. This form of control is created through virtual or visible expressions. For instance, in a workplace, expressions such as building of an open space to bring to the consciousness of viewers towards environmental sustainability through business activities could be made. Also researched by Schein (1997) states, a workspace could be designed, and an employee wearing a particular dress code. As part of the cultural behavior, an organization may require its staff to wear a uniform in order to create a culture of professionalism.

According to Dent (1991) the history in cultural research revealed that there are distinct subcultures within organizations and this can be referred to as a clan. Ouchi (1979) developed the concept of a clan in control research. His concept rests upon the idea that individuals are exposed to a socialization process that instills in them a set of skills and values. This socialization process may relate to groups, such as professions (i.e. doctors or accountants), or groups within organizations that form some other kind of boundary, such as an organizational

unit or division. Clan controls work by establishing values and beliefs through the ceremonies and rituals of the clan.

Further credibility was added to this method of organizational control through the study of Ann and Malin (2011). These authors explained that MCS serves as an arrowhead in addressing the challenges emerging from the business environment stating that there is a need to design and be connected to the environment in order to make business implementation sustainable. It is important to create an enabling environment sustainable enough to guarantee operation safe for employee and others stakeholders. This control measure help to impact on the performance of employee. According to Bourguignon et al., (2004), to achieve the purpose of an organization, there is a need to be sensitive and considerate on issues affecting the employees because their effectiveness depends on how the approaches adopted by the management aligned with the expectation of the employees and their beliefs. Often, such considerations are relative to the result seen in employee productivity capacity.

2.4. Management control system and strategic change in agro-Food management

2.4.1. Management control system in agro-food management

This academic literature examined MCS and the need for planned proactive and deliberate responses to change in the Agro-food business environment of Nigeria. The objective of the entrepreneur or manager in this environment, to planned changes is attributed to a clearly set out design and implementation steps. In this context, the philosophy and science of change intertwined with the study of entrepreneurship management and change is concerned with the nature of leadership, intuition and business logic.

Nasiru & Rapiah (2017) noted, the administrative challenges being faced by many listed organizations in Nigeria have crippled the operations of firms, therefore, leads to a state where many listed organizations in the country are being taken over or being delisted by Corporate Affairs. This challenge has prompted the Corporate Affairs Commission and Security and

Exchange Commission to issue a series of regulatory codes of conduct that will tackle these administrative challenges (Adewuyi & Olowookere, 2013).

Nasiru & Rapiah (2017) opined that the MCS was designed to arrest the administrative issues through an institutional reform that will enable the firm's performance. Scholars such as Sharma et al., (2010) buttressed the assertions of Nasiru and Rapiah saying that the regulatory intervention led to the emergence of many managerial techniques such as MCS, corporate governance, total quality management, cultural control among others noting that they have achieved institutional changes through the micro process. Ehikioya (2009) and Khogmalai et al., (2010) stated that the institutional background of MCS in Nigeria gave it similar features in practice by Nigerian organizations.

The importance of the agricultural sector to Nigeria's economy cannot be overemphasized. The State (2014) submitted that in 2013, the sector contributed 22% of the country's GDP more than Crude oil, Telecom, and Manufacturing with 14%, 9%, and 7% respectively. CBN (2016) maintained that 24.18% of the country's GDP in the year came from the agricultural sector which stresses its importance. However, the sector has been facing different issues that hinder its effective performance.

Dannson, et al (2004) noted that the agribusiness enterprises in Nigeria are classified into farming input supply firms, food processing firms, distribution companies, and marketing firms. In this study, the company used belongs to one or more of these categories and faces the challenges such as poor management and record keeping, improper allocation and under utilization of resources among others.

The challenge calls for a better method that improves administrative effectiveness such as MCS. As a result of this Nasiru and Rapiah (2017) suggested an enlightenment campaign on the managers for the adoption of MCS which has little adoption in the sector leading to little or no little concerning MCS in the agro-food sub-sector in Nigeria. Though some efforts have been made to achieve this. Nasiru and Rapiah (2017) opined that despite the efforts made through MCS in Nigeria, administrative challenges are still prevalent and affect the economy

negatively. These challenges were more prevalent in larger organizations with more than 100 employees and permeated almost all sectors and industries in Nigeria (Daloz, 2005).

2.4.2. Nigeria agro- food industry

According to Adewuyi and Olowookere (2013) these administrative challenges that have constantly crippled the operational activities of organizations in Nigeria has therefore prompted the Corporate Affairs Commission and Security and Exchange Commission to issue a series of regulatory code of conduct that will tackle these administrative challenges. Nasiru and Rapiah (2017), opined that the MCS was designed to arrest the administrative issues through an institutional reform that will enable firm's performance. Scholars such as Sharma et al., (2010) buttressed the assertions of Nasiru and Rapiah saying that the regulatory intervention led to the emergence of many managerial techniques such as MCS, corporate governance, total quality management, cultural control among others noting that they have achieved institutional changes through the micro process. Ehikioya (2009) and Khogmalai et al., (2010) stated that the institutional background of MCS in Nigeria gave it similar features in practice by Nigerian organizations.

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2.4.3. Strategic change in agro-food management

The best means to more fundamental ways change in a business context is in the intuitive hypothetical testing of change in material and human resources. Change is an inevitable part of doing business that can have a positive impact on an organization. Though not wholly embraced by entrepreneurs and managers of organizations, it has an underlying strength of positively turning the prospect of a business around when properly planned. Change in business team leader, business public image, products, and services can help drive up sales and cash flow. Creating complaint windows for customers and improving on quick-quality delivery of food products is a strategy that can be adopted by entrepreneurs and managers.

Easterbrook, the CEO of McDonald's in his maiden speech as a new CEO revealed his turnaround strategy for McDonald's saying he planned to strip away layers of management, focus more on listening to customers, and act faster to adapt to consumers' changing tastes. Obviously, when an organization replaces a close-minded manager with an open-minded manager who is open to creativity and new ideas, employees naturally feel they have to give more input in their job functions. Thus its concludes to say positive consequences of change has the following consequences: 1) Help entrepreneurs to stay current with recent trends, 2) Create new opportunities, 3) Encourages innovation and creativity among workers ,4) Increase efficiency in quality of products and service delivery, and 5) Can have a positive effect on entrepreneurs, managers, employees' attitudes and morale.

Burke & Litwin (1992) categorized changes according to the scope of the change and divided changes into transformational changes and transactional changes;

1. Transformational change is described as a change when there is a shift in a business culture of an organization resulting in sharp divers from an existing strategic business model that the organization has used in the past. Magloff (2016) stated that transformational change occurs in response to changes in technology, or as companies adapt to take advantage of new business models. Thus this form of change occurs when there a leadership changes hand in an organization whose responsibility is often challenged by existing structure, culture, management, inspire employees and take to the organization to the next level of business growth.

2. Transactional changes in the business context are described as the process of making constructive changes in project requirements and product standards. These changes deal with psychological and organizational variables that predict and control the motivation and performance consequences of the work-group climate (Burke & Litwin, 1992). Thus it is considered that transactional changes are changes within the organizational structure whereby employees achieve their objectives through punishment and rewards set by a team leader.

2.5. Role of management control system in organizational strategy

In this study, an empirical analysis will be carried out in chapter five to investigate how helpful MCS can develop and empower organizations' corporate, business, and functional levels to attain its business goals, using Flour mills Nigeria as a case study. In the context of this research study on the Agro-food business management environment with a focus on Flour mills in Nigeria, it is worthy of note that the main aim of the MCS is for effective management of man and materials of an organization. The activities of the human resource play a central role in the operations and performance of an organization both in the corporate, functional, and business levels. Therefore, the role of MCS in organizational strategy and planning is directly related to each other through its human resource which works at all identified levels of the organization with the purpose of achieving the objectives.

The nature of strategy in different contexts remains flexible. It is generally agreed that long-term, difficult-to-change, and wide-ranging issues are strategic. This is particularly true when the issues involve interactions with the environment. The nature of strategic decisions in administration and management is complex, taken under uncertainty, and unstructured. The nature of strategy and management is relevant in management concepts and guidelines which contribute to management success.

Langfield-Smith (1997) states that for a strategy to achieve its target, the MCS must be designed to support it. By this, specific control practices will be tailored to the chosen corporate, functional, or business strategy. The author noted that MCS ensures that relevant information is engraved in the strategy during development to ensure a successful implementation and achieve a competitive advantage. A good number of pieces of literature have discussed the impact of strategy on the MCS while little attention has been paid to the influence of MCS on strategy Henri (2006). Marginson (2021) noted that an organization that understands how MCS influences the top management activities will enable it to develop a better MCS which would align the strategy implementation and yield the desired result.

Govindarajan & Gupta A. K., (1985) while commenting on MCS and strategy relationship from the contingency theory perspective, stated that many scholars have agreed that strategic business units are positively influenced by the formal control, and strongly advised that control system should be designed considering the business strategy of the firm which will guarantee higher performance. The author opined that effective matching of the business environment, the organization's internal structure, and strategy through the MCS guarantees higher performance because there is a good working environment provided for the strategy through such integration.

According to Ajagbe et al., (2011) organizational strategy is the designed path and scope through which it aims to satisfy the stakeholders' long-term interest through its pattern of combining the resources, competencies, and skills. The above-stated scholarly views are towards the direction that an organization cannot exist without having a strategy it will use to achieve its long-term goals and satisfy the needs of the stakeholders. Gareth (2010) stressed

that a strategy is an essential tool for achieving organizational success. The author noted that strategy helps an organization to be proactive (not reactive) on its challenges and on its future. The author noted that strategy inspires commitment of the employees on the operations leading to higher productivity and profitability. There are different types of strategy whose uniqueness depends on the type of decision taken, the unit concerned, and the managers that formulate and implement the actions. The types of strategy include corporate strategy, business strategy, and functional level strategy.

2.6. Corporate, business, and functional levels strategies

2.6.1. Corporate strategy

Corporate strategy overall organizational strategic process that involves the formulation and implementation of policies leading to achieving the corporate objective (Aayaz, 2020). According to this author, the corporate strategy identifies Strengths, weaknesses, and opportunities, threats, (SWOT) in the business environment because it assesses the strength of the firm to eliminate the weakness. Similarly indicate the opportunities that would always not make the organisation liable to a threat. Again this strategic level emphasized the mission and vision of the firm based on the views of the top management.

According to Feldman (2020) corporate strategy spell out managers' views on the opportunity of the organization and how they intend to run the scope provided by the opportunities. These opportunities and scope are; 1) how resources of the organization are intended to be coordinated within the firm limit, 2) how business relationships with other firms in the industry are coordinated, and 3) how determined business could be engaged, that is how it should be carried out to achieve the corporate objectives. Thus according to Grant (1995) this type of strategy deals with the design chosen by the corporation in tackling challenges found in opportunities. A typical picture of these challenges could be in: 1)merger and acquisition, 2) diversification, and 3) vertical and horizontal integrations, etc.

2.6.2. Business strategy

Business level strategy involves a strategic actions are designed to be used for interaction with the business environment to achieve and accomplish the long-term business goal of the firm Long et al. (2012). It comprises sets of competitive action plans put in place by the organization's management to attract customers, improve performance, compete favorably, and achieve the firm's goals. The business-level strategy breaks down corporate strategy, the mission, and the vision of the firm into concrete strategies. At this level of strategy are specific goals that serve as a blueprint of the success of the organization's survival in the composite environment. Thompson et al. (2004) described these strategic plans as drive forces that business managers adopt to achieving a competitive market position, recruit skilled and competent employees, satisfy their customers, carry out effective operations and achieve the desired goal.

According to Ajagbe (2007), it is emphasized that an organization can hold a well-designed strategy because of challenges that arise from employees, vision, and resource challenges. But a proactive organization through a robust and effective business strategy designs towards measuring aims could address the obstacle to ensure continuity in operations. This author further stated that without a defined business strategy competitive advantage, it is impossible to sustain and maintain competitiveness in the business world. On the other hand, Aamodt (2007) maintained that business strategy defines the competitive position of a firm, and determines the pattern of distribution of resources to achieve corporate, business, and functional objectives. Therefore developing a business strategy requires formulating the business mission, re-scanning, and re-scrutinizing the business environments and key activities involved in the value chain (Boyne et al., 2003).

2.6.3. Functional strategy

According to Weir et al. (2000), functional strategies are designed as action plans to improve the organizational performance, strengthen the resources and its coordination ability aimed at creating core competencies. They are specific purposes set within a department by first-line

managers or supervisors to achieving marketing, finance human, and material resources (Agwu and Onwuegbuzie, 2017). The strategic goal in a functional department is to create core competence in which organizations are placed in a competitive position. Agwu and Onwuegbuzie (2017) posit that functional strategy is basic to attain a high-quality product and services, creating innovativeness in the firm. Thus functional strategy are ways in which ends and means are adequately and effectively implemented.

2.7. Empirical literature

Highlighting the viewpoints of Tucker et al. (2009), De Tonia and Toncia (2001), and Nasiru and Rapiah (2017), MCS is an essential organizational principle towards making a progressive impact in the management system of organization at all levels. First, Tucker et al. (2009), carried out an empirical investigation to determine the relationship between the management control systems and strategy. The findings revealed that there are three independent, though mutually exclusive propositions between MCS and strategy. According to the authors, these are:

1. The degree MCS influences formulation of strategy and strategy implementation varies from organization to organization depending on the pattern of design and method of use of MCS by an organization;

2. The design of MCS depends on an organization's strategic orientation;

3. There is a relationship between a particular strategic orientation of an organization and its MCS design that enhances the organization's performance.

They suggested that there is a need to further investigate the relationship between MCS and strategy by using a non-linear and non-recursive model and adopting a longitudinal approach to the study. They also recommended the need for more research by developing an explanatory framework that integrates different strategic typologies and applying a wider approach that has been earlier used in making the key construct of MCS - Strategy operational.

Second, De Tonia and Toncia (2001) viewed MCS based on the existentialism of tradition and modern MCS in relation to performances in an organization's success. Notably, De Toni and Toncia (2001) showed important differences between traditional and modern performance evaluation systems. In the author's publication, traditional MCS performance take account of cost, efficiency, result evaluation, profit-making, short-term orientation, and prevalence of individual measures. Prevalence of functional measures, comparison with standards, and aim at evaluation. While modern MCS performance account for value-based, evaluating results and their causes, customer orientation, long-term orientation, the prevalence of team measures, the prevalence of transversal measures, improvement monitoring and aim at evaluating and involving.

Specifically, these authors described traditional performance evaluation systems based on oriented to profit and on performance cost and efficiency analysis. With these systems, results of the period in the past are evaluated by calculating individual financial indicators and comparing them to a prescribed standard value. On the other hand, modern performance evaluation systems focus on consumers and the satisfaction of their needs and the company's created value. Therefore, not only results of periods in the past are evaluated but also put a definition to the motives that gave rise to these results and to predict steps to improve the future results. Based on these reasons, not individual indicators are evaluated, but other sets of key indicators that include various crosscuts of performance are included in the evaluation.

The authors conclude that in analyzing modern MCS performance impact in organizations, mentioning the advantages of non-financial indicators (i.e. Reflect on decisions made during the current period, details of the current position and growth potential, Long-term perspective, disclose causal relations, reflect the impact of internal factors) are essentials. This is because these indicators unfold causal factors that could lead to the given results and could be followed when taking appropriate decisions in the future perspective. Unlike the perspective of the traditional MCS performance evaluation which is based only on financial indicators. Because it reaches interested parties too late because of the scruitinization process,protocols and information is too generalized and one-dimensional. Moreover, financial indicators are historic in nature, the details are not enough, and they are only relevant in a short-term perspective.

Third, Nasiru and Rapiah (2017) carried out an investigation on the effect of the management control system on the performance of Nigerian firms. The result from the conceptual work affirmed the three elements or MCS package of control identified by Brown (2008) namely planning, administrative and cultural controls. The study also identified that there is poor implementation of the MCS by Nigerian firms which is one of the challenges affecting in its operations, and therefore suggested that managers of Nigerian firms should be enlightened on the adoption and the practice of MCS to improve the formulation and execution of both corporate, functional, and business strategy of the organizations. They stated that this would reverse the current isomorphic pressure on MCS in Nigeria and improve the performance of firms in the country. The study further suggested that developing countries should be investigated empirically on the level of adoption and method of practice of MCS aimed at unveiling how the poor application affects firm's performance in Nigeria.

In conclusion, these authors' viewpoints on this subject topic are very strategic in establishing, stabilizing, and consolidating in the practice of this internal mechanism, MCS principle in a firm corporate, business, and functional levels. This is because all resources and output are fundamental incline to vision, mission, and values statements and each distinguish organization from one another.

CHAPTER THREE

HYPOTHESIS DEVELOPMENT

3.1. Management control system

Having a logical hypothetical statement for outlining the hypothesis of this research through the emphasis of the understanding of the subject terms:1) management, 2) control , 3) system, and the management control processes used in corporate, business and functional strategic levels is critical for the sake of the academic scholars and future studies.As a result there is need to highlight the important views of these subject terms and management processes.

Management is a system an organization uses to organize resources and processes that would coordinate and lead a company to effective performance. That is management is planning, organizing, commanding, coordinating, and controlling. According to Koontz and Weihrich (1990) the importance of management process in designing and maintaining an organizational environment is harmonizing the entire structural system for efficient delivery. This describes the people and desire attention form those who carry out the managerial functions, management is involved in all organizations and the aim of all managers are the same.

Smriti (2013) describe a system as a business theory arising from an approach and development from the business and management context. It is understood that a business system of organization means the way sections, bodies, and processes in a company or organization interact with the organization, with the market, and industry as a whole. When the output is provided, the strategy that would be applied would entail specific inputs. These resources are - materials, labor, and equipment needed. The system, therefore, is to achieve a predetermined result each time it is executed and should be open to, and interact with its environments. An organization structure that makes up a system must be flexible, collaborate, and work in teams to get results.

The concept of control is the process of analyzing and correcting action. In controlling, the organization essentially monitors whether it is receiving an expected result of process and expectation. According to Guan, L. (2007). Cengage learning, p. 11, control is monitoring a planned implementation and taking corrective action. Control is usually achieved when there is feedback. Meaning control interaction offers a message and gets in return a response. Hence, feedback is obtained with detailed responses that could determine or evaluate steps that were adopted or followed to implement a plan. Feedback depends on the type received. Nevertheless, an implemented plan can be continued by management and, needed correction to harmonize with a master plan if there is a need for re-planning.

3.2. Control process using corporate strategy

The control process involves using strategic means in realizing the organization's policy towards their benefits. Implementation of strategies include those that matches the organization's corporate policy and the industry environment. Stakeholders involving in this Process are board members, stakeholders, employees etc. This group of individuals formulate and implement policies that act, support, and used as framework at the company top levels and policy making. For example, these groups involves introducing policies and plans to enable the organizations to interact with other firms, ensures that applicable and standard principle that makes them stand out in premium graded products and production branded. In this type of strategy are investment and finance decisions, regular dividend payout to shareholders, election of board members, corporate social responsibility.

3.3. Control process using business strategy

In business level strategy, activities are outline to incorporate company’s policies, goals, and actions with the focus on knowing how to deliver premium service, product and value to high esteem customers while also maintaining a competitive advantage. At this level, strategies are translated into more tangible actions through the activities of business and company managers. Focus and Functions at this level are; 1) Business development, 2) Customer relationship management, 3) sales and marketing, and often supported and achieved by report from sales

research & development, establishing of team monitoring.

3.4. Control process using functional strategy

At this level, supervisors, departmental heads and functional managers and employees are basically the essential workforce that translates the corporate goals, business strategies into actionable results. Because they are specifically responsible and directly engaged in the daily activities and the operational services of the organization. Activities involves use of materials and human resources to translate polices business plans into product output consumers and customers demand. The strategies use include workers integration, work management, decision on production process and improvement, staff recommendations, teamwork, dress code, timeliness, departmental meetings, seminars & workshops. See figure 3.1 below for diagrammatic representation of control processes at these strategic levels.

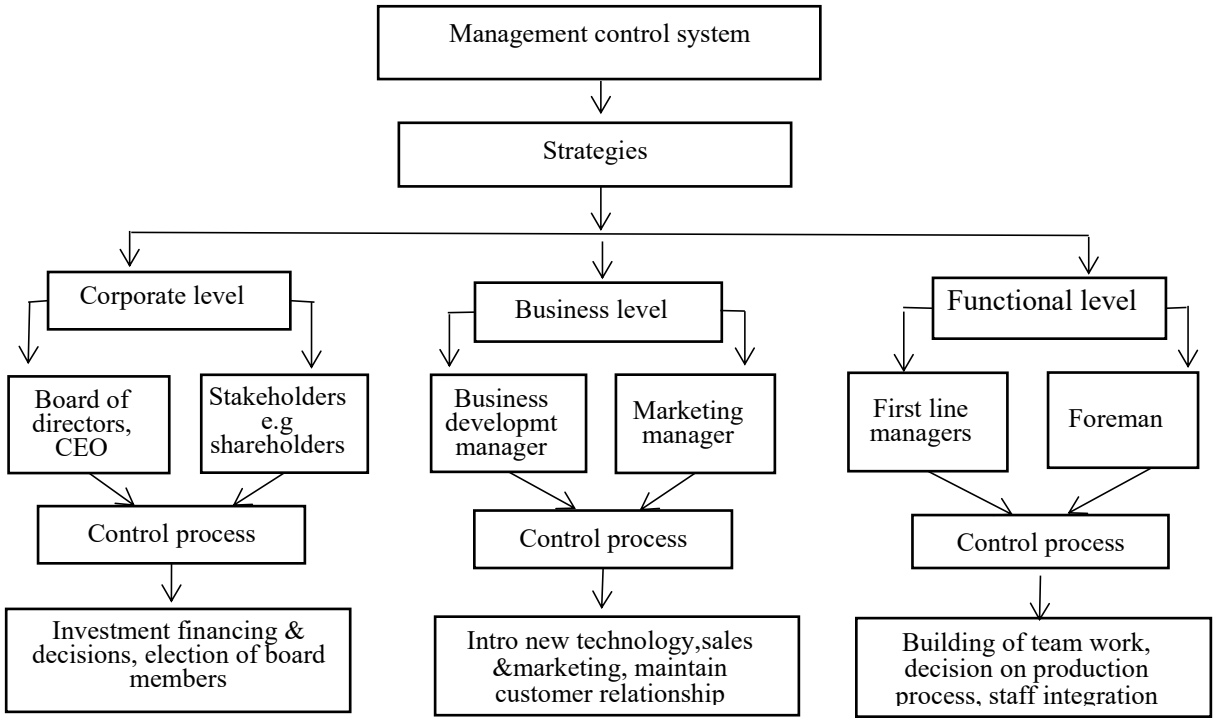

Figure 3.1. Diagram showing the flow chart of MCS control process in corporate, business and functional levels. Source: Author's construction, the role of MCS in FMNL corporate, business and functional levels, 2021

3.5. Organizational corporate, business and functional control process performance evaluation

Measuring the performance of organizational goals is pertinent and foundational in the management of the corporate, business, and functional strategy in an organization. Thus the avoidance of these key measurement systems in the corporate policy, effective and efficient decisions making would lead to inefficient use of materials and human resources and, consequently, increases the probability of failure (Vieira, Major& Robalo, 2009). Performance management indicates and signals the most important areas that are predisposed to evaluation for purposes of the MCS. Therefore choosing the effective and appropriate performance measurements is an act that requires careful consideration of those responsible for its design and development. The measurements should have characteristics of validity, reliability, clarity, cost-effectiveness, timeliness, accessibility, and controllability (Malmi & Brown, 2008). Organization goals are placed on the value of modern performance evaluation systems to the concerns of consumers and satisfaction of their needs and create value for companies. With these systems, it is possible not to only have an intention to evaluate historic results of certain management activities, but also to define reasons that led to these results and to foresee steps to improve the future results.

3.6. Research hypothesis

Therefore based on the discourse and research objective, the following hypothesis were formulated:

1. H_0: Management control system has no significant effect on FMN Plc corporate level strategy.

   H_1: Management control system has significant effect on FMN Plc corporate level strategy.

2. H_{01}: Management control system no has significant effect on FMN Plc business Level

strategy.

H_{11}: Management control system has significant effect on FMN Plc business level strategy.

3. H_{02}: Management control system has no significant effect on FMN Plc functional level strategy.

   H_{12}: Management control system has significant effect on FMN Plc functional level strategy.

CHAPTER FOUR

METHODOLOGY

4.1. Research design

The research methodology begins with research design. Research design comprises the methods/procedures employed to conduct field research. It defines the study type, data collection methods and analysis. This study made use of descriptive research design since it seeks to establish the effect of management control system on corporate, functional, and business level of Agric-food business management. It is a case study research work that used Flour Mills Nigeria Plc employee's perception to get empirical data on effects of MCS on corporate, functional, and business level. For this study, a questionnaire will be used in the research approach in other to collect quantitative data which is analyzed using descriptive statistical tools.

4.2. Research methodology

This research adopted is the quantitative methods. The quantitative method concentrates on comprehensive empirical data obtained from the questionnaire responses. Facts, knowledge and evidence, ideas and structures described and interpreted the data sets numerically, categorically, and statistically through computations and statistical method analysis. To elicit the relevant information for this study, a questionnaire was designed and administered to staff of Flour Mills Nigeria Plc who are the respondents.The responses received through this method form the source of primary data for this research,

4.3. Data collection instrument

For this study, a structured questionnaire was designed to get the opinion of the target population, bearing in mind the variables under study. The questionnaire has two sections -

section A and section B. Section A is designed to obtain personal information about the respondents such as age, gender, income level, and educational qualifications. Section B is designed to randomly test the perception of FMN Plc staffs on the effects of MCS on corporate, business, and functional levels of the organization. A scientific view of how the respondent job performance and overall staff productivity is influenced by exposure to creativity, job independence, motivation or compensation in the form of fringe benefits, organization communication design, utilization of human and material resources, use of technology, and customer satisfaction forms the basics of the question. A five-point Likert scale is used, (1= strongly disagree, 2=disagree, 3=uncertain,4=agree, and 5=strongly agree). The questions were closed-ended statements, following answers from which the respondent is to tick appropriately. See tables 5.30, 5.31, 5.32, 5.33 in appendix one pages 95 and 96.

4.4. Study population and sample size

The study population comprised employees of FMN Plc with a population size of about 750 workforces (Lagos state). Out of this, a proportionate valid sample size of 178 employees is taking for sampling. The Sample size was derived with Cochran representative sample proportion formula (Z2pq/e2) which was used to generate the sample size for this research (Cochran, 977). Where, n is the sample size, z is the confidence level, and also set at 1.96 corresponding to the 95% confidence level, p is the estimated proportion (sample size) of the characteristics of in the population, q = 1-p and e is the margin of error. The Cochran formula is considered ideal when there are the precise level of precision, confidence level and estimated proportion characteristics of the population. It is considered appropriate in a situation when there is a large population. This is because a sample of any given size provides more information about a smaller population than a large one. Degree of accuracy desired, usually set at 0.05. n = (1.96)2 (0.50) (0.50) / 0.502 = 384 (Sample size). However, 384 questionnaires were distributed for data collection, which 271 response would be considered very adequate, due to timelines a total of 178 usable questionnaire was collected and entered into SPSS file for analysis run. These questionnaires were sent out via google form to the employees. And it was shared with the help of the company staff to the potential responders in FMN Plc. And via a google form, the response also was collected.

4.5. Data analysis

The data collected was analyzed using excel software and SPSS 20.0. The data were processed and inputted into excel and SPSS 20.0. (Statistics Program for Social Sciences) software for statistical analysis. This analysis carried out included hypothetical analysis of internal data normality, consistencies, relationships, connections. This is to check the effect of MCS (dependent variable) on corporate, business, and functional levels (independent variables). Correlation analysis also checked whether the interaction of the variables is statistically relevant or not. The statistical tools used to measure these include the regression model, Spearman correlation model, and Cronbach's alpha test.

4.6. Validity of the instrument

Validity refers to the degree to which an instrument accurately measures what it intends to measure. This research study measures validity by considering "content validity" which is the responsiveness of respondents to the research questions.The questionnaire adequately measures or represent the research questions in this study and further measure the change of responsiveness to each of the research questions related to the role of management control systems in an organization corporate, functional, and business levels on FMN Plc.

4.7. Reliability of the instrument

According to Robinson (2009) Cronbach's alpha is the most acceptable concept for defining internal accuracy. The instrument is the general term that researchers use for a measurement device, examples are survey, test, questionnaire, etc. Instrument reliability is the extent to which an instrument consistently measures what it is supposed to. This research study adopts a questionnaire for testing the reliability of the research questions and hypothesis. It measures "Internal consistency reliability" by looking at the total sample population, consistency of the respondents, the responsiveness of respondents, and proportionate sample size of the total population observed.

CHAPTER FIVE

DATA ANAYSIS AND RESULT

5.1. Frequency distribution

Analysis of the data collected for the research process has a total valid number of 178 questionnaires completed by employees of Flour Mills Nigeria Plc. Relatively considered as an employee, with good knowledge on the role of management control systems (MCS) in organisations corporate, functional, and business level, and are those covering age group 25 below and 56 and above,different gender, income level, and education qualifications.

The assessment of demographic information of gender in FMN Plc contributed positively to this research. The consideration of gender made it possible to see that everyone who is potential responder relative to gender are well captured to avoid biased result. This consideration was attach to male, female, and others who might not belong to any of the male or female gender. The number of percentage for male responses were 60% and female response 37% and others had 3%. See table 5.1, and figure 5.5 in appendix 6 ,page 1186.

Table 5.1. Frequency distribution of gender in FMN Plc. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative percentage
Valid	**Male**	107	60	60
	Female	66	37	97
	Others	5	3	100.0
	Total	178	1	

Age of respondents was one of the basic demographic characteristics considered as important to ascertain the age groups, numbers and percentages of workforce in the case

study company. The largest response rates of 40% comes from the age group 36-45 years. This is followed by the respondent in the age 26-35 years. The third largest is age group showing 46-55 years, 22% respondents, while age 25 below and 56 and above are 1% and 8% years. See table 5.2, and figure 5.6 in appendix 6, page 116.

Table 5.2. Frequency distribution of age group in FMN Plc. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative percentage
Valid	**25 below**	2	1	1
	26 -35	50	28	29
	36 -45	72	40	70
	46 -55	39	22	92
	56 & above	15	8	100.0
	Total	178	100.0	

Educational qualification was also one of the factor considered in this research. From the study, participants have either a bachelor, masters or PhD degrees. While others have either a professional qualification, vocational and primary and secondary school certificates. However only few individuals with 7% earn a PhD. The largest response rate was 39% for Master's degree holders, while bachelor degree rates were 34%, and a response rate of 20% for respondents having other qualifications. See table 5.3, and figure 5.7 in appendix 6, page 117.

Table 5.3. Frequency distribution of educational qualifications in FMN Plc. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative percentage
Valid	**Bachelors**	61	34	34
	Masters	70	39	73
	PhD	12	7	80

Table 5.3 Continued

A	B	1	2	3	4
	Others	35	20	100	
	Total	178	100.0		

Income level assessment was a significant factor considered in the demographic information of this study. It was considered because it provided information concerning the workforce remuneration which is also very important in knowing the level of welfare of workers. From the analysis, income level of 101,000 to 200,000 had 35%, this is followed by the income level of 201,000-300,000 with 33%, while the third group is 100,000 below with 26% responses. The group ‘’others’’ had 6% both for response category. See table 5.4, and figure 5.8 in appendix 6, page 117.

Table 5.4. Frequency distribution of income level in FMN Plc (currency in naira, ₦). Source: Author’s conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	**Percentage**	**Cumulative Percentage**
Valid	**100.000 below**	47	26	26
	101.000-200.000	63	35	61
	201.000-30.000	58	33	94
	Others	10	6	100.0
	Total	178	100.00	

Note. Income level was measured in Nigeria currency, naira (₦) , Equivalent of one (1) euro = 503.62 naira.

5.2. Research questions

The idea of the research work is therefore given prominence of the problem militating against the effective administration of management control systems (MCS) on corporate level,

functional level, and business level of Flour Mills Nigeria Plc. To help find solution to the foregoing problems, the following questions was drawn and rephrased from similar test carried out by (Willert, J., Israelsen, P., Rohde, C., & Toldbod, T. 2017).

1. Do MCS have effect on corporate level strategy of Flour Mills Nigeria Plc.?

2. Do MCS have effect on business level strategy of Flour Mills Nigeria Plc.?

3. Do MCS have effect on functional level strategy of Flour Mills Nigeria Plc.?

5.3. Answer to research questions

5.3.1. Do MCS have effect on corporate level strategy of Flour Mills Nigeria Plc?

The breakdown of the response to this question showed that 125 respondents (17%) of the total of 178 respondents strongly disagreed or disagreed that MCS have effect on corporate level of FMN Plc, 77 respondents (11%) are uncertain that MCS have effect on corporate level of FMN plc. 510 respondents (72%) strongly agreed that MCS have effect on corporate level of FMN Plc. Thus, these views are important to either or not conclude on MCS significant effect on FMN Plc corporate strategy. See table 5.5, and figure 5.1 in appendix 5,page 114 showing graphical representation.

Table 5.5. Questionnaire responses to the effect of MCS on corporate level of FMN Plc**.** Source: Author's conducted online survey, the role of MCS in FMNL Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative Percentage
Valid	**Strongly disagree or disagree**	125	17	17
	Uncertain	77	11	28
	Strongly agree or agree	5s0	72	100.0
	Total	178	100	

5.3.2. Do MCS have effect on business level of Flour Mills Nigeria Plc?

The breakdown of the response to this question showed that 146 respondents (21%) of the total of 178 respondents strongly disagreed or disagreed that MCS have effect on business level of FMN Plc, 103 respondents (14%) are uncertain that MCS have effect on corporate level of FMN Plc. 463 respondents (65%) strongly agreed or agreed that MCS have effect on corporate level of FMN Plc. Thus, this views are important to either or not conclude on MCS significant effect on FMN Plc business strategy**.** See table 5.6, and figure 5.2 in appendix 5, page 114 showing graphical illustration.

Table 5.6. Questionnaire responses to the effect of MCS on business level of FMN Plc. Source: Author's conducted online survey,the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative Percentage
Valid	**Strongly disagree or disagree**	146	21	21
	Uncertain	103	14	35
	Strongly agree or agree	463	65	100.0
	Total	178	100.0	

5.3.3. Do MCS have effect on functional level of Flour Mills Nigeria Plc?

The breakdown of the response to this question showed that 194 respondents (27%) of the total of 178 respondents strongly disagreed or disagreed that MCS have effect on functional level of FMN Plc, 123 respondents (17%) are uncertain that MCS have effect on functional level of FMN Plc. 395 respondents (56%) strongly agreed or agreed that MCS have effect on functional level of FMN Plc. Thus, this views are important to either or not conclude on MCS significant effect on FMN Plc functional strategy See table 5.7, and figure 5.3 in appendix 5, page 115 showing graphical illustration.

Table 5.7. Questionnaire responses to the effect of MCS on functional level of FMN Plc. Source: Author's conducted online survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Frequency	Percentage	Cumulative Percentage
Valid	**Strongly disagree or disagree**	194	**27**	**27**
	Uncertain	123	17	44
	Strongly agree or agree	395	56	100.0
	Total	178	100.0	

Further illustration showing MCS variable responses, see table 5.36 in appendix 4, page 113, and figure 5.4 in appendix 5,page 115 respectively. While the breakdown of responses for data analysis is presented in appendices 2 and 3. See tables 5.34 and 5.35 pages 97 and 105.

5.4. Reliability test

The reliability test carried out were exploratory factor analysis and Cronbach's alpha reliability tests. Both tests provided detail information to which the questionnaires were coherent which FMN Plc internal mechanism (MCS) was adopted.In exploratory factor analysis, KMO and Bartletts and Rotation factor matrix were the tests done. For the former, the test was analyzed to determine the variance and significant value of variables (MCS, CS, BS and FS) and, the later tested for the compatibility and inter-relatedness of the questions to provide relativeness and same meaning to these variables. See tables 5. 8 and 5.9 respectively.

Table 5.8. KMO and Bartlett's test showing variance and significant value from exploratory factor analysis of MCS, CS, BS, and FS. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels, 2021

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.903
Bartlett's Test of Sphericity	Approx. Chi-Square	2128.011
	Df	120
	Sig.	.000

Table 5.9. Rotated Factor Matrix showing pattern of questions relative to MCS, CS, BS and FS. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

	Factor			
	BS	**FS**	**CS**	**MCS**
BS1	.814			
BS2	.780			
BS1	.772			
BS4	.727			
FS3		.860		
FS2		.792		
FS4		.751		
FS1		.601		
CS3			.802	
CS4			.799	
CS2			.713	
CS1			.662	
MCS3				.765
MCS2				.724
MCS4				.670
MCS1				.646

While Cronbach'a Alpha tested the internal consistency and presents variables whose thresholds are above or below 0.7 (70%). Cronbach's alpha threshold of 0.7 is the standard value considered adequate for internal accuracy measurement. Therefore, in this test standard threshold for variable MCS is .860; CS is .888; BS is .935; and FS is .935. See table 5.10.

Table 5.10. Reliability data showing thresholds of MCS, CS, BS and FS. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Variable	Cronbach's Alpha	Cronbach's Alpha Bases on standardized Items	N of Items
MCS	.860	.860	4
CS	.888	.888	4
BS	.935	.935	4
FS	.902	.901	4

5.5. Correlation analysis

The object of the correlation analysis is to calculate and analyze the strength of relationship between the variables. This study focused on Spearman's correlation coefficients, which takes into account for non-parametric correlation analysis, and values between -1 and +1 indicate negatively correlated (-1) to uncorrelated (0) to positively correlated (+1) (Zou et al., 2003). The coefficient values of the correlations (i.e. positive or negative) defines the course of the partnership between the variables. In this research. Thus this analysis showed the correlation coefficient and relationship between the MCS and CS, BS and FS. The correlation test defined the relationship between these variables as, CS = .563**, BS =.477** and FS=.484** and each having P-value 0.000. See table 5.11

Table 5.11. Correlation data of MCS, CS, BS and FS. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

			MCS	**CS**	**BS**	**FS**
Spearman's rho	**MCS**	Correlation Coefficient	1.000	.563**	.477**	.484**
		Sig. (2-tailed)	.	.000	.000	.000
		N	178	178	178	178
	CS	Correlation Coefficient	.563**	1.000	.485**	.462**
		Sig. (2-tailed)	.000	.	.000	.000
		N	178	178	178	178

Table 5.11 continued

A	B	C	1	2	3	4
	BS	Correlation Coefficient	.477**	.485**	1.000	.637**
		Sig. (2-tailed)	.000	.000	.	.000
		N	178	178	178	178
	FS	Correlation Coefficient	.484**	.462**	.637**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	178	178	178	178

5.6. Research hypothesis

This sub-chapter provides a valid presentation and analysis of regression test carried out on data gathered from the field. The Statistical Package for the Social Sciences (SPSS) was used and this determined the significance level (P-value 0.05) of the variables. In this study the following hypotheses will be drawn:

1. H_0**.** Management Control System has no significant effect on corporate strategy of FMN Plc.

   H_1. Management Control System has significant effect on corporate strategy of FMN Plc.

2. H_{01}. Management Control System has no significant effect on business strategy of FMN Plc.

   H_{11}. Management Control System has significant effect on business strategy of FMN Plc

3. H_{02}.Management Control System has no significant effect on functional strategy of FMN Plc.

   H_{12}. Management Control System has significant effect on functional strategy of FMN Plc.

5.7. Regression analysis

Regression model is a significant statistical approach for this research analysis which shows the relationship between variables to be identified and characterized for review. To confidently determine which factors matter most, which factors can be ignored, and the link or influence between variables. In this study, the regression analysis was used to predict the impact and direction of MCS on CS, BS and FS. This assessed the level of significant impact of MCS on the dependent variables and as a result was able to find answer to the research hypotheses. However, this model analysis began with test for sample data distribution for normality or non-normality.

The test for normality was carried out by transforming, logging and exploring each variable for data analysis. From the test table are two sides indicating two different data analysis, Kolmogorov-Smirnov showing sample size above 100 and Shapiro-Wilk showing sample size below 100 and their P-values are 0.000 respectively. The side considered in this research was Kolmogorov-Smirnov because the sample size is above 100. Based on the P- value, the data were not normally distributed, since their p-value is less than 0.05 significant value. Hence the adoption of ordinal regression model. Therefore in order to ascertain the hypothesis in this study, P-value 0.05 at confident interval 95% was used. See table 5.12.

Table 5.12. Data normality test of MCS, CS, BS, and FS**.** Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	**Df**	**Sig.**	**Statistic**	**Df**	**Sig.**
Log_MCS	.241	178	.000	.762	178	.000
Log_CS	.255	178	.000	.783	178	.000
Log_BS	.228	178	.000	.797	178	.000
Log_FS	.218	178	.000	.837	178	.000

5.8. Comparison of the influence of MCS on CS, BS and FS using mean values

One way anova test carried out showed the result when the mean values of the variables are compared together to know the effects of their variabilities within and between groups. See table 5.13.

Table 5.13. Comparison of CS, BS an FS using mean values. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Sum of Squares	Df	Mean Square	F	Sig.
CS	Between Groups	101.340	16	6.334	10.795	.000
	Within Groups	108.543	185	.587		
	Total	209.883	201			
BS	Between Groups	108.633	16	6.790	8.159	.000
	Within Groups	153.939	185	.832		
	Total	262.572	201			
FS	Between Groups	78.136	16	4.883	5.973	.000
	Within Groups	151.250	185	.818		
	Total	229.386	201			

5.9. Analysis of influence of MCS on corporate strategy (H_O &H_1)

To determine the influence of MCS on corporate strategy, the following analysis was carried out: case processing summary, model fitting information, goodness of fit, Pseudo R-Square and parameter estimate.

The first is case processing summary. This analyzed the summaries of dependent variable questions that is in scales, number of output in responses and their percentage values. It also indicated the valid number of data samples used in the analysis and number of no case missing values. See table 5.14.

Table 5.14. Corporate level strategy data case processing summary. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		N	Marginal Percentage
CS	1.00	1	0.6%
	1.25	1	0.6%
	1.50	11	6.2%
	1.75	5	2.8%
	2.00	4	2.2%
	2.25	1	0.6%
	2.50	3	1.7%
	2.75	5	2.8%
	3.00	12	6.7%
	3.25	4	2.2%
	3.50	12	6.7%
	3.75	6	3.4%
	4.00	30	16.9%
	4.25	20	11.2%
	4.50	34	19.1%
	4.75	10	5.6%
	5.00	19	10.7%
Valid		**178**	**100.0%**
Missing		**0**	
Total		**178**	

Model of fitting information was the second analysis carried out. This test shows how the ordinal regression model used in this analysis fitted the data. In this table it showed that the result when the intercept value (baseline model without independent variable, MCS) interacted with final model (with independent variable, MCS), the only effect seen was the effect of final model, MCS. And the different is seen in the chi square. The different in chi square showed both models are not related because the value of likelihood for intercept 247.832 minus

Likelihood for final model 94.361 produce different of 53,471 chi square instead of zero, which shows significant value of 0.000. Therefore there is no evidence supporting the null hypothesis. This table therefore determine whether to accept null hypothesis or to reject it. See table 5.15.

Table 5.15. Corporate level strategy model fitted information. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	247.832			
Final	194.361	53.471	1	.000

The next is analysis of goodness of fit table. This table shows how the data set sample size differs in distribution from the actual population distribution. In this test, the data set showed the Pearson chi square value 94.34, indicating the level of statistical significant difference between the expected frequencies (MCS influence on CS) and the observed frequencies (sample size), while and deviance chi square value 82.382, showed how closely this model's predictions are to the observed outcomes. Both Pearson and deviance has P-value of 0.06 and 0.051 respectively. See table 5.16.

Table 5.16. Corporate level strategy goodness of fit. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

	Chi-Square	Df	Sig.
Pearson	94.321	63	.006
Deviance	82.382	63	.051

The analysis of Pseudo R-square showed the variability of MCS in the CS. That is outcome of the CS can be linked to the amount of influence MCS had on shown in it. In this table the amount of MCS in CS variation in this test is 0.261(26%) using Nagelkerke as a reference point. See table 5.17.

Table 5.17. Corporate level strategy Pseudo R-Square. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Cox and Snell	.259
Nagelkerke	.261
McFadden	.062

The analysis showing the impact of MCS on CS is the parameter estimate table. This is indicated through the index value in estimates and significant values columns. This table showed the interactions between MCS and CS variable. It showed at what level of significant value MCS have a relationship with CS in order to say that MCS has impacted positively or negatively on the CS. The predicted probability impact of MCS on CS from the table shows log of odds is 2.912 when there is significant different of 0.000. This significant different shows the changes of MS on CS. See table 5.18.

Table 5.18. Significant influence of MCS on corporate level strategy. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Estimate	Std. Error	Wald	Df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[CS = 1.00]	-.795	1.149	.479	1	.489	-3.046	1.456
	[CS = 1.25]	-.077	.909	.007	1	.932	-1.858	1.704
	[CS = 1.50]	2.055	.666	9.534	1	.002	.751	3.359
	[CS = 1.75]	2.479	.662	14.011	1	.000	1.181	3.777
	[CS = 2.00]	2.739	.665	16.981	1	.000	1.436	4.042
	[CS = 2.25]	2.797	.666	17.660	1	.000	1.492	4.101
	[CS = 2.50]	2.960	.669	19.594	1	.000	1.649	4.271
	[CS = 2.75]	3.200	.675	22.468	1	.000	1.877	4.522
	[CS = 3.00]	3.695	.692	28.471	1	.000	2.338	5.052
	[CS = 3.25]	3.845	.698	30.319	1	.000	2.477	5.214
	[CS = 3.50]	4.276	.716	35.664	1	.000	2.873	5.679
	[CS = 3.75]	4.481	.724	38.286	1	.000	3.062	5.901

Table 5.18 continued

A	B	1	2	3	4	5	6	7
	[CS = 4.00]	5.360	.756	50.257	1	.000	3.878	6.841
	[CS = 4.25]	5.913	.771	58.786	1	.000	4.401	7.424
	[CS = 4.50]	7.048	.798	78.021	1	.000	5.484	8.612
	[CS = 4.75]	7.550	.812	86.377	1	.000	5.958	9.142
***Location**	**MCS**	**2.912**	**.412**	**50.038**	**1**	**.000**	**2.105**	**3.719**

5.10. Analysis of influence of MCS on business strategy (H_{01} &H_{11})

This analysis involves the detail analysis of the case processing summary, model fitting information, goodness of fit Pseudo R-Square and parameter estimate to determine the influence of MCS on BS.

In the case processing summary analysis, the analytical summary of dependent variable scales, number of output in responses and their percentage value was done. The table also indicated the valid number of data samples used in the analysis and number of no case missing values. See table 5.19.

Table 5.19. Business level strategy data case processing summary. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		N	Marginal Percentage
BS	1.00	5	2.8%
	1.25	5	2.8%
	1.50	8	4.5%
	1.75	5	2.8%
	2.00	4	2.2%
	2.25	4	2.2%
	2.50	5	2.8%
	2.75	7	3.9%

Table 5.19 continued

A	1	2	3
	3.00	7	3.9%
	3,25	7	3.9%
	3.50	10	5.6%
	3.75	11	6.2%
	4.00	30	16.9%
	4.25	15	8.4%
	4.50	31	17.4%
	4.75	11	6.2%
	5.00	13	7.3%
Valid		**178**	**100.0%**
Missing		**0**	
Total		**178**	

The test for model of fitting information showed how the ordinal regression model used in this analysis fitted the data. In this table it showed the result that when the intercept value (baseline model without independent variable, MCS) interact with final model (with independent variable, MCS), the only effect seen was the effect of final model, MCS. The intercept has value of 252. 977, the final model has 203.893 and the chi square value is 49.083.The model fitting information has a significant value 0.000.Therefore there is no evidence supporting the null hypothesis in the model. This table therefore determine whether to accept null hypothesis or to reject it. See table 5.20.

Table 5.20. Business level strategy model fitted information. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	252.977			
Final	203.893	49.083	1	.000

The goodness of fit table showed how the data set sample size differs in distribution from the actual population distribution. In this test, our data set showed the Pearson chi square value 76.992, indicating the level of statistical significant difference between the expected frequencies (MCS influence on BS) and the observed frequencies (sample size), while the deviance chi square value 86.973, showed how closely this model's predictions are to the observed outcomes. Both Pearson and deviance had P-value of 0.111 and 0.024 respectively. See table 5.21.

Table 5.21. Business level strategy goodness of fit. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels, 2021

	Chi-Square	**Df**	**Sig.**
Pearson	76.992	63	.111
Deviance	86.973	63	.024

The Pseudo R-square of BS showed the percentage variability of MCS it is explaining. That is the outcome of the BS can be linked to the amount of influence MCS had shown in it. In this table the amount of MCS in BS variable in this test is 0.242 (24%) using Nagelkerke as a reference point. See table 5.22.

Table 5.22. Business level strategy Pseudo R-Square. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Cox and Snell	.241
Nagelkerke	.242
McFadden	.053

Analysis of parameter estimate showed the impact of MCS on BS variable. Most importantly, it showed the link between the interactions in the two variables and the impact of MCS on BS variable. This is indicated through the index value in estimates and significant values columns. From the table it showed at what level of significant value MCS had an interaction with BS in order to say that MCS had impacted positively or negatively on the BS. The predicted probability impact of MCS on CS from the table shows log of odds is 2.719 when there is

significant different of 0.000. This significant different shows the changes of MCS on BS. See table 5.23.

Table 5.23. Significant influence of MCS on business level strategy. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		Estimate	Std. Error	Wald	Df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[BS = 1.00]	.607	.738	.676	1	.411	-.840	2.054
	[BS = 1.25]	1.397	.674	4.293	1	.038	.076	2.718
	[BS = 1.50]	2.144	.656	10.670	1	.001	.858	3.430
	[BS = 1.75]	2.480	.658	14.211	1	.000	1.190	3.769
	[BS = 2.00]	2.706	.661	16.743	1	.000	1.410	4.002
	[BS = 2.25]	2.899	.666	18.976	1	.000	1.595	4.204
	[BS = 2.50]	3.116	.672	21.520	1	.000	1.799	4.432
	[BS = 2.75]	3.402	.681	24.947	1	.000	2.067	4.737
	[BS = 3.00]	3.673	.691	28.255	1	.000	2.319	5.028
	[BS = 3.25]	3.919	.700	31.306	1	.000	2.546	5.291
	[BS = 3.50]	4.224	.712	35.212	1	.000	2.829	5.620
	[BS = 3.75]	4.529	.723	39.255	1	.000	3.112	5.945
	[BS = 4.00]	5.320	.747	50.662	1	.000	3.855	6.785
	[BS = 4.25]	5.739	.758	57.337	1	.000	4.253	7.224
	[BS = 4.50]	6.883	.785	76.790	1	.000	5.344	8.423
	[BS = 4.75]	7.592	.811	87.680	1	.000	6.003	9.181
***Location**	**MCS**	**2.729**	**.403**	**45.749**	**1**	**.000**	**1.938**	**3.520**

5.11. Analysis of influence of MCS on functional strategy (H_{O2} &H_{12})

The following test analysis was carried out to ascertain the hypothesis of this strategy. They were case processing summary, model fitting information, goodness of fit Pseudo R-Square and parameter estimate.

In the case processing summary analysis, the analytical summary of dependent variable scales, number of output in responses and their percentage value was obtained. It also indicated the valid number of sample data used in the analysis and number of no case missing values. See table 5.24.

Table 5.24. Functional level strategy data case processing summary. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

		N	Marginal Percentage
FS	1.00	9	5.1%
	1.25	18	10.1%
	1.50	4	2.2%
	1.75	6	3.4%
	2.00	9	5.1%
	2.25	4	2.2%
	2.50	6	3.4%
	2.75	1	0.6%
	3.00	13	7.3%
	3.25	5	2.8%
	3.50	16	9.0%
	3.75	8	4.5%
	4.00	30	16.9%
	4.25	8	4.5%
	4.50	23	12.9%
	4.75	11	6.2%
	5.00	7	3.9%
Valid		**178**	**100.0%**
Missing		**0**	
Total		**178**	

Test for model of fitting information showed how the ordinal regression model used in this analysis fitted the data. In this table it showed the result that when the intercept value (baseline

model without independent variable, MCS) interact with final model (with independent variable, MCS), the only effect seen was the effect of final model, MCS. The intercept has value of 252. 062, the final model has 201.736 and the chi square value is 50.326.The model fitting information had a significant value 0.000.Therefore there was no evidence supporting the null hypothesis in the model. This table therefore determine whether to accept null hypothesis or to reject it. See table 5.25.

Table 5.25. Functional level strategy model fitting information. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Model	-2 Log Likelihood	Chi-Square	Df	Significant
Intercept Only	252.062			
Final	201.736	50.326	1	.000

The goodness of fit table showed how the data set sample size differs in distribution from the actual population distribution. In this test, the data set showed the Pearson chi square value 89.479, indicating the level of statistical significant difference between the result of expected frequency (MCS influence on FS) and the observed frequency (sample size), while the deviance chi square value has 86.496 , showed how closely this model's predictions are to the observed outcomes. Both Pearson and deviance has P-value of 0.016 and 0.026 respectively. See table 5.26.

Table 5.26. Functional level strategy goodness of fit. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

	Chi- Square	Degree of freedom	Significant
Pearson	89.479	63	.016
Deviance	86.496	63	.026

Pseudo R-square of FS showed the percentage variability of MCS in FS. That is the amount of MCS influence in FS. In this table the amount of MCS in BS variable in this test is 0.242 (24%) using Nagelkerke as a reference point. See table 5.27.

Table 5.27. Functional level strategy Pseudo R-Square. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

Cox and Snell	.246
Nagelkerke	.248
McFadden	.054

The parameter estimate showed the impact of MCS on FS variable. It also shows the link between the relationship in the two variables and the impact of MCS on FS variable. This is indicated through the index value in estimates and significant values columns. From the table it shows at what level of significant value MCS has a relationship with FS in order to say that MCS has impacted on the positively or negatively on FS. The predicted probability impact of MCS on CS from the table shows log of odds is 2.728 when there is significant different of 0.000. This significant different shows the changes of MCS on FS. See table 5.28.

Table 5.28. Significant influence of MCS on functional strategy. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels, 2021

							95% Confidence Interval	
		Estimate	**Std. Error**	**Wald**	**Df**	**Sig.**	**Lower Bound**	**Upper Bound**
Threshold	[FS = 1.00]	1.291	.681	3.592	1	.058	-.044	2.625
	[FS = 1.25]	2.620	.662	15.648	1	.000	1.322	3.919
	[FS = 1.50]	2.803	.666	17.718	1	.000	1.498	4.108
	[FS = 1.75]	3.057	.672	20.672	1	.000	1.739	4.374
	[FS = 2.00]	3.404	.684	24.802	1	.000	2.064	4.744
	[FS = 2.25]	3.547	.689	26.533	1	.000	2.197	4.897
	[FS = 2.50]	3.753	.696	29.060	1	.000	2.389	5.118
	[FS = 2.75]	3.787	.698	29.477	1	.000	2.420	5.154
	[FS = 3.00]	4.199	.713	34.661	1	.000	2.801	5.596

Table 5.28 continued

A	1	2	3	4	5	6	7	8
	[FS = 3.25]	4.346	.719	36.588	1	.000	2.938	5.754
	[FS = 3.50]	4.798	.734	42.733	1	.000	3.359	6.237
	[FS = 3.75]	5.021	.741	45.941	1	.000	3.569	6.473
	[FS = 4.00]	5.900	.764	59.681	1	.000	4.403	7.397
	[FS = 4.25]	6.170	.770	64.235	1	.000	4.661	7.679
	[FS = 4.50]	7.222	.798	81.925	1	.000	5.658	8.786
	[FS = 4.75]	8.258	.854	93.592	1	.000	6.585	9.931
***Location**	**MCS**	**2.728**	**.404**	**45.503**	**1**	**.000**	**1.935**	**3.521**

5.12. Result

5.12.1. Demographic information and questions response breakdown

The results from the breakdown of responses gave an intuitive understanding. The demographic information analysis shows a strong results that offer an insight that catches public attention. While variables, independents and dependent provided significant levels that is potential in enhancing performance at the FMN Plc corporate, business and functional levels growth.

The breakdown of the analysis of the responses showed that the group, strongly agree or agree had the highest percentage of positive contribution to the questionnaire, followed by the group, strongly disagree or disagree and the last, uncertain group. The report also showed that MCS had positive contribution more to the questionnaire than any other group, followed by the CS and BS groups. The last in the overall contribution is the FS.

For gender, there were more male response than female. The response indicated that the workforce is dominated by male which can be attributed to the nature of service done in the

company. It is a positive indicator, afterwards, that a large proportional population sample was used to have a valid findings.

This research indicates that age group 36-45 years respondents are more in the work force, active and responsive to the organizations' functional engagements. This also means that a wide representative population sample has been chosen and the query reply is probably accurate

Master degree holder showing the largest response rate of 39.3% of the overall percentage This shows that this set of people participated more and perhaps more active and participatory in public issues. This analysis therefore test the knowledge so as to improve the adequacy and quality of the knowledge delivery.

Income level, from the analysis, the result showed that income level of 101,000 to 200,000 participated more in the response with the rate of 35.4% and of the second best paid group for salary and wages. The income level of 201, 000-300,000 group had the second best response with 32.6%, but are the best group with the highest salaries and wages payment. While the third group is 100,000 below with 26.4% responses and fall to the third best group both in response numbers and salaries and wages group. The group ''others'' had 5.6% both for response category and level of income and salary receipt. See table 5.4.

The reliability test result from KMO and Bartlett's tests indicated the proportionate of variance of 2128.011 and significant value of P-value 0.000 that signifies a significant correlation under which MCS, CS, BS and FS are related and linked together. While in the rotation matrix result, the analysis of the four questions showed how each variable is relatively common to giving same meaning, interpretation and summary that represents the true value of the variables. All values produced in the analysis are positive indicting alignment and proper framing of the question for a justifiable outcome. While the Cronbach's Alpha shows that the variables achieved maximum values above the threshold of 0.7 indicating a consistency in the variables and reliability in the analysis and results.

The correlation analysis result obtained indicated that the variables coefficients showed positive values between -1 and +1. The variables, corporate strategy is .563; business strategy is .477; functional strategy is .484. These indicates positive and strong association between the independent and dependent variables.

The result for normality test showed P-value 0.000 which is less than significant value of 0.05, providing evidence that the assumption for the use of ordinal regression model was not violated. This is expected for the use of non-parametric method (not normally distributed data sets) for ordinal regression analysis.

5.12.2. MCS influence on corporate strategy (Test for hypotheses H_O & H_1)

In this result, case processing summary and model fitting information exhibited a high standard values into acceptable level for the use of the model to evaluate data in this research. The model fitting information has a P-value of 0.000.While in the goodness of fit, it is expected that Pearson and deviance chi squares should have significant value above P-value 0.05 to be good fit for this model. But there is a variation between the P-value of Pearson chi square and deviance chi square. Pearson chi square showed a P-value below 0.05, indicating that there is a significant different between MCS and the CS (P-value 0.006). While in the deviance result, it showed that the model closely predicted the result of MCS on CS (P-value 0.051). However, the Pseudo R-Square showed MS significant variability in the CS which by implication means that 26% of MS influence can be translated from CS outcome.

The result from the parameter estimate test showed the relationship, impact and direction between MCS and CS and this provided evidence to make a decision to either reject null hypothesis or accept alternative hypothesis and vice versa. Therefore from the result, it indicates that the MCS significantly influence CS since the significant value is 0.000, there is a positive impact of MCS on CS. And this means that at corporate level, MCS is a positive predictor of FMN Plc management control system. Because for every one unit increase of MCS, there is a predicted probability increase of (2.912) in the log of odds (0.00) falling at higher level on the CS control process. Therefore, H_1 is accepted and H_0 is rejected.

5.12.3. MCS influence on business strategy (Test for hypotheses H_{O1} & H_{11})

The case processing summary and model fitting information exhibited an outcome and an acceptable standard values that meet the assumptions for the use of the model to evaluate the data sets in this research. The model fitting information has a P-value of 0.000.While in the goodness of fit, it is expected that Pearson and deviance chi squares should have significant value above P-value 0.05 to be good fit for this model. Pearson chi square showed a P-value above 0.05, indicating that there is no significant different between MCS and the BS (P-value 0.111). While in the deviance result, it showed that the model predictions of MCS on BS with P-value of 0.024 is not close in prediction. However, the Pseudo R-Square showed MCS significant variability in the BS which is by implication means that 24% of MCS influence can be seen the outcome of the BS.

The result from the parameter estimate test showed the relationship, impact and direction between MCS and BS and this provided evidence to make a decision to either reject null hypothesis or accept alternative hypothesis and vice versa. The result from this test indicated a significant positive predicted value of BS given a unit increase of MCS. The significant value of MCS influence on BS is P-value 0.000.Which means that MCS significantly influence BS. It shows that MCS in a positive influence on BS level and contribute to the success of FMN Plc strategy in achieving its goals. Because for every one unit increase of MCS, there is a predicted probability increase of (2.729) in the log of odds (0.00) falling at higher level on the BS control process. Therefore H_{11} is accepted and H_{01} is rejected.

5.12.4. MCS influence on functional strategy (Test for hypotheses H_{O2} & H_{12})

Result from the case processing summary and model fitting information exhibited an outcome and an acceptable standard values that meet the assumptions in the use of the model to evaluate the data sets in this research. The model fitting information has a P-value of 0.000. While in the goodness of fit, it is expected that Pearson and deviance chi squares should have significant value above P-value 0.05 to be good fit for this model.But Pearson chi square

showed a P-value below 0.05, indicating that there is significant different between MCS and the FS (P-value 0.016). Also from the deviance result, it showed that the model predictions of MCS on FS (0.026) is not close. However, the Pseudo R-Square also showed MCS significant variability in the FS which by implication means that 24% of MCS influence can be observed in the outcome of the FS.

The result from the parameter estimate test showed the relationship, impact and direction between MCS and FS and this provided evidence to make a decision to either reject null hypothesis or accept alternative hypothesis and vice versa. The significant value of MCS influence on FS is P-value 0.000. Which means that MCS is significantly impact on FS. This indicated that there is a positive predicted value of FS given a unit increase of MCS. The result showed that MCS is a positive influence on FS level. At this level, MCS positively contribute to the success of FMN Plc FS strategy. Because for every one unit increase of MCS, there is a predicted probability increase of (2.728) in the log of odds (0.00) falling at higher level on the FS control process. That is as MCS increases in performance at functional level, FS is predicted to have increase by (2.728) in success when it adopts the strategic steps in achieving its accomplishment. Hence H_{12} is accepted and H_{01} is rejected.

This analysis of variance of the variables indicated that the regression model has a P-value less than 0.05 in all groups. This indicated that the mean samples was different from the sample size. This further shows that there is confidence in the interactions between MCS and CS, BS and FS. Which signifies the influence of MCS on these variables, hypothesis H_1, H_{11}, and H_{12} are true.

Based on the research findings, a brief summary of positive and negative hypothesis are outlined with reasons. See table 5.29.

Table 5.29. Hypothesis accepted and hypothesis rejected**.**Source:Author's construction,base on the analysis of findings, 2021

Hypotheses	Results	Implications
Hypothesis H_0	Rejected	Hypothesis rejected / holds because there is no significant difference between the outcome (impact of MCS on CS) and observed data sample size
Hypothesis H_1	Accepted	Hypothesis accepted because there is significant difference between the expected frequency (impact of MCS on CS) and observed data (sample size).P-value < .05
Hypothesis H_{01}	Rejected	Hypothesis rejected / holds because there is no significant difference between the expected frequency (impact of MCS on BS) and observed data sample size.
Hypothesis H_{11}	Accepted	Hypothesis accepted because there is significant difference between the expected frequency (impact of MCS on BS) and observed data (sample size). P-value < .05
Hypothesis H_{02}	Rejected	Hypothesis rejected / holds because there is no significant difference between the outcome (impact of MCS on FS) and observed data sample size.
Hypothesis H_{12}	Accepted	Hypothesis accepted because there is significant difference between the expected frequency (impact of MCS on FS) and observed data (sample size). P-value < .05

CHAPTER SIX

DISCUSSION, CONCLUSION AND LIMITATIONS

6. 1. Discussion

This research has highlighted the importance of management control system in FMNL plc organizational structure; corporate, business and functional levels. The analysis result from the responses, productive demographic information is reliable and consistent with the internal mechanisms. The analysis and findings in this research also indicated the potential and vital component towards achieving greater performance at various strategic levels.

From the result of response report, there are indications that the increase in level of positive responses, 66.36%, total percentage in strongly agree or agree responses from all variables is an indication of a positive adoptions and standard practice exhibited by the organisations at the strategic levels. In which the impact are felt and seen by the workforce. Similarly these workforce who produced these responses have proved to greater length their opinion, alignment, understanding in the organisation daily affairs. This gave a complete overview and guide quite considered very important to finding out the possible and potential results in this research.

1. In hypothesis (H_0 & H_1), the analysis carried on MCS influence on CS showed that all basic tests carried out followed the necessary procedures. The test result showed that as MCS increases by one unit, CS is predicted to increase by 2.912.The Hypothesis, H_1 test showed a significance value less than 0.05, therefore null hypothesis, H_O was rejected and the alternative hypothesis, H_1 was accepted. In hypothesis H_1, the predictor (MCS) showed influence on the response variable (CS). This was accepted because there is significant difference between the expected frequency (outcome of MCS on CS) and the observed data (sample size) and this makes this hypothesis valid. This led to the rejection of the null hypothesis which implies that there is no significant different between the predictor and the response variable. Similarly in

the analysis of the correlation test, indicates that CS has a positive significant values which is statistically relevance in the description of the positive association between the MCS and CS.

Observed, the analysis of goodness of fit showed that Pearson chi square have significant value below P-value 0.05 instead of P-value above 0.05. This is caused by problem of inadequate linear components. Such include higher number of response received from cells reflecting zero values, those responses that is contained in the scale ‘’uncertain’’. This often led to wider/closer distance between the expected outcome and the sample size.

However, the significant influence seen in this hypothesis and the stronger correlation connection, supported by the analysis of variance result in this variable are linked to the significant value the company placed on organizations’ culture. At the strategic level, question were measured in relation to ‘organization’s norms and values’’. The findings of this study confirmed the compatible with scientific studies of Dent (1991) who described the influence of culture in corporate existence as a concept that rests upon the idea that individuals are exposed to a socialization process that instill in them a set of skills and values. From the responses, it is identified that this organisation corporate strategy success is built on strong culture.

2. In hypothesis (H_{01} & H_{11}), the MCS influence on BS analysis also showed that all basic tests carried out followed the necessary procedure. In the result, it indicated that as MCS increases by one unit, BS is predicted to increase by 2.729.The Hypothesis, H_{11} tested showed a significance value 0.000 result, therefore null hypothesis, H_{O1} was rejected and the alternative hypothesis, H_{11} was accepted. In hypothesis H_{11}, the predictor (MCS) showed influence on response variable (BS). Hypothesis H_{I1} was accepted because there is significant difference between the expected frequency (outcome of MCS on BS) and the observed data (sample size) and this makes this hypothesis valid. This led to the rejection of the null hypothesis (H_{01}) which implies that there is no significant different between the predictor and the response variable. Also in the analysis of the correlation test, it indicated that BS has a positive significant values which is statistically relevance in the description of the association between the MCS and BS.

Observed, the result of goodness of fit showed that there is a deviation in the deviance chi square significant value. The P-value is below 0.05 instead of above P-value 0.05. This is caused by problem of influential observation. Certain covariates having large values in few cells in the variables. They are not evenly distributed. Such are not adequate for the model to give prediction above P-value greater than 0.05.

All things been equal, the factor responsible for this result is the consistency and adherence to the organization (FMN Plc) master plans and the use of management practices to maintain a competitive position in the market, carry on its operations, satisfy customers and attain the desired ends of the business. The findings of this study were confirmed and also compatible with scientific studies of (Thompson et al., 2004). It state that business strategy is a game plan adopted by the business managers to achieve competitive market position, recruit skilled and competent employees, satisfy its customers, carry out effective operations and achieve the desired goal. These sets of strategic moves and activities help the organisation to get more customers and loyalty, reinforce and support performance. This success is in tandem with many years range of plans towards direction, destination and corporate intent. In the industry today, the company standout in investments, diversification, market dominance and cutting edge technology.

3. In hypothesis (H_{02} & H_{12}) the analysis followed all the guidelines in carrying out the tests. The test on MCS influence on FS showed that the explanatory variable is significant on FS at this level. As MCS increases by one unit, FS is predicted to increase by 2.728. The Hypothesis, H_{12} tested showed a significance value 0.000 result, therefore null hypothesis, H_{02} was rejected and the alternative hypothesis, H_{12} was accepted. In hypothesis H_{12}, the predictor (MCS) showed influence on response variable (FS). Hypothesis H_{I2} was accepted because there is significant difference between the expected frequency (outcome of MCS on FS) and the observed data (sample size) and this makes this hypothesis valid. This led to the rejection of the null hypothesis (H_{02}) which implies that there is no significant different between the predictor and the response variable. Also in the analysis of the correlation coefficient, it indicates that MCS and FS has a positive connection which is statistically relevance in the description of the association between both variables.

Observed, the analysis of goodness of fit showed that Pearson and deviance chi squares are both significant in values, instead of P-value above 0.05. For both tests result, this can be attributed to linear components, residual variation and influential observation. Combined effect of these factors are possibility of the consequences on these tests.

However confirming this strategic level with the findings of Weir et al. (2000) which describes functional strategies a designed action plans to improve the organizational performance, strengthen the resources, and its coordinating ability aimed at creating core competencies. Considerably as defined by the characteristic of FMN Plc, one of the short term plan as indicated by the result of the analysis carried out are the connection, relationship, open and effective communication existing between the top management level and the middle and lower employees. Understanding open and effective communication creates an atmosphere that allows for the flow of energy and creativity. This type of existing relationship leads to timely evaluation utilization of resources and outline action plan for improvement. Thus the employee are more proactive in strategies knowing that their actions are considered equally important in the success of the company.

The anova result showed highly compatible variables because when the mean values of these variables are compared together using one way anova, in each group, there is significant value less than 0.05. This indicate that MCS variance is significantly differences with the sample size. In FMN Plc strategic levels, when MCS is implemented at the most average level on CS, BS and FS, there is significant influence of MCS in the internal mechanism on each level of strategy.

6.2. Conclusion

In author's opinion, the contemporary mixing in the business environment remains a system subject to contrast in management experiment. And it will keep evolving till the diluted structure is attained. But by keeping sense of proportionality in the management practices and linking different style with common and effective details, a business can achieve a unique strategy to suit the organization's specific need. As an important tools in business management,

MCS need utilize the non-financial and human resources of an organization to achieve competitive advantage even as this has led to high degree of debate amongst the business stakeholders, managers, government institutions and corporate bodies.

In this research, the problem statement needed to test the subject topic, MCS at corporate, business and functional strategy levels is peculiar to FMN Plc both at the organisational, industry and region levels. Using outlined basic sets objectives and tasks in achieving the desired aim, widened the gap to identifying the relevance of aligning human and material resources (technology, finance, strategy etc.) factors to organizational goals. This scenario proved a better option in influencing resource utilizations and manpower to the basic management standards. It also provided an essential facts from the research topic to Agric-food business by unveiling the relevance of understanding better practice of agricultural management and integration of practices at different component levels and strategies (corporate, business and functional levels.)

Accomplishment of this research studies however fulfilled the author's expectations in the role played by MCS in an organisation corporate, business and functional strategies. The discussion, comparison, statistical modeling, test, analysis and study on this topic provided insight in the previous scientific studies out of which one of the scientific studies was adopted for this research purpose, the five typologies; 1) planning ,2) administrative, 3) cybernetics, 4) reward and 5) compensation and cultural controls) framework from the ''object of control''. This could not have been more useful than the basic insight it offered in this study. The adopted object of control gave a positive contribution to the knowledge in understanding the process towards the analysis of FMN Plc organization norms and values, relationship between top and other employees, communication, organization competitive position and strategic ends and means.

Furthermore, considering also other scientific literature studies in the past, the role played by MCS cannot be considered less in this research without a conclusion of knowledge drawn from this perspective. Drawing a perspective from Agric-food management environment with FMN Plc in focus, human resource play a central role in the operations and performance in

organizations, both in corporate, functional and business strategy levels. Since the organisation strategy used in this objective directly related to each other, and the nature of strategy in different contexts remain flexible. MCS provided management concepts and guidelines such as control process in product quality, public relations and norms and values, to which they are handled to a success. As a result, the guided questions to achieving this research set target/aim was framed in the context of the set objectives leading to hypothetical development, research method and justification etc. Thus research analysis and test using a reliable SPSS software for regression and correlation model analysis provided an efficient analysis, result and conclusion.

The test analysis and result justified the importance of quantitative approach adopted in this study. In the justification, this method proved how practically impossible it is to analyze variable which do not indicate quantity but can only be signify by position of place they are standing in a data- categorical variables. In addition, the close ended nature of the questions provided sets of distinctive pre-define responses. Hence it is possible to use this method in this study process.

The results from the analysis using this method proved effective and indicate that management controls system has a significant effect on Floor mills Nigeria Plc in the control processes at corporate, business and functional levels. From the research inputs, MCS influence on the predictors for significant effect, enhances increase in performance and ensure execution of strategies on these levels. However, the following outlines below gave a logical conclusion to each variable CS, BS and FS. But first in conclusion is the demographic information and result from the response report generated in the cause of this research analysis.

The demographic information and the effective responses gave an important highlight that is as useful as it cannot be considered less important. The workforce rating and responses have proved to greater length their opinion, alignment, understanding in the corporate affairs of FMN Plc. The consideration of these useful information would be a potential weapon that could see the beginning of the next level of success of FMN Plc to greater height in the welfare, resource utilization, teamwork, productive and efficient workforce and above all,

outstanding performance in the food industry. Therefore a good appraisal to these response will further enhance better industry opportunity.

Outlining the conclusion of MCS influence on corporate strategy (CS), business strategy (BS) and functional strategy (FS) the following were considered;

1. (a) Factor analysis showed relativities of the four questions towards giving a useful meaning, interpretation and summary of CS variable, and contributed to the Cronbach's alpha test value which showed 0.888, exceeding above the threshold of 0.7. This justifies a positive and stronger internal mechanism of MCS on corporate Level strategy.

   (b) The correlation coefficient 0.563** showed a strong and positive correlation association between MCS and CS. Both relationship is statistically important at $P < 0.05$. In FMN Plc, the integration between MCS and CS is so strongly in corporate strategy, hence MCS principles and practices are considered in decisions making towards norms and values in the organisation management at this level.

   (c) Anova significant value further confirms the confidence in the link between MCS and CS. It proved that all experiment data sets used in this research study are statistically significant. Since after spreading out the variances of data sets within group and between groups, it show minimal variance amongst them.

(d) For hypothesis (H_0 & H_1), hypothesis H_1 provided a significant value signifying positive influence of management control system on Flour Mills Nigeria corporate strategy. It is an indication that MCS is a positive contributor to the success value in CS. The significant value obtained in the test result is less than the P-value of 0.05 at 95% confidential level. This proved that there is significant different between the sample size and result obtained. Therefore the P-value 0.000 gives more confidence to conclude that there is significant relationship between MCS and CS. And consequently, alternative hypothesis H_1 accepted and null hypothesis H_0 is false and rejected.

These viewpoints confirms that hypothesis H_1 is true and therefore, it is concluded that MCS has a significant influence on FMN Plc corporate level strategy.

2. (a) Factor analysis showed that the four questions asked in the variable are relative and gave the same meaning, interpretation and, summary of BS variable true value and contributed to the Cronbach's alpha test value which showed 0.935, exceeding above the threshold of 0.7. This justifies a positive and stronger internal mechanism of MCS on business level strategy.

(b) The correlation coefficient 0.477 showed a good strength of positive relationship between MCS and BS and the relationship is statistically important $P < 0.05$. The correlation is statistically relevant in both variables connections. It indicates that there is closer interaction between MCS position and business strategy during goal accomplishment for market values, stronger ties between FMN Plc and customers etc.

(c) Anova significant value further proved that there is little or no variation within and between groups of questions used to formulate the questionnaire. This shows that even during possible challenges, market uncertainty, MCS is still significant and impacts in the business decisions.

(d) Therefore, for hypothesis (H_{01} & H_{11}), hypothesis H_{11} provided a significant value showing influence of management control system on Flour Mills Nigeria business strategy. It is also an indication that MCS is a positive contributor to the success value in BS. The significant value obtained in the test result is less than the P-value of 0.05 at 95% confidential level. This proved that there is significant difference between the sample size and result obtained. Therefore the P-value 0.000 gives more confidence to conclude that there is significant relationship between MCS and CS. And consequently, alternative hypothesis H_{11} is accepted and null hypothesis H_{01} is rejected.

These viewpoints confirms that hypothesis H_{11} is true and therefore, it is concluded that MCS has a significant influence on FMN Plc business level strategy.

3. (a) The factor analysis showed that the four questions are collective and relatively provided same meaning, interpretation and summary of FS variable in this research and also contributed to the Cronbach's alpha test value which showed 0.901, exceeding above the threshold of 0.7.This justifies the correctness of the data accuracy and synergy towards obtaining the good result needed in this research and conclusion on functional level strategy.

(b) The correlation coefficient 0.484 is a clear positive association between MCS and FS. Both relationship is statistically important $P < 0.05$ and are statistically relevant in connections. The MCS is a good internal mechanism tools used to ascertain the level success at this strategic level. Hence the significant association of both indicates positive consideration and synergy towards a better performance for potential and positive outcome.

(c) The result from one way anova proved the level that reflected the positive practices and standard adopted in FMN Plc functional strategy. It confirms the confidence in the link between MCS and FS are true. It proved that there are closer and collaborative effort of these variables towards implementing the action plans of FMN Plc in its daily activities in carrying out specific roles.

(d) Similarly for this hypothesis (H_{02} & H_{12}), it is stated that hypothesis H_{12} provided a significant value showing influence of management control system on Flour Mills Nigeria functional strategy which signifies an indication that MCS is a positive contributor to the success value in FS. This significant value, P-value 0.000 obtained from the test analysis is less than the P-value of 0.05 at 95% confidence interval set for this research proved that there is a significant different between the sample size and result obtained. Therefore the P-value 0.000 gives more confidence to conclude that there is significant relationship between MCS and FS. And consequently, alternative hypothesis H_{12} accepted and null hypothesis H_{02} is rejected.

These viewpoints confirms hypothesis H_{12} is true and therefore it is concluded that MCS has a significant influence on FMN Plc functional level strategy.

In summary, the conclusion implies that:

1. Significant number of FMN Plc employees agree that MCS has significant effect on corporate level strategy;

2. FMN Plc employees significantly agree that MCS has effect on business level strategy;

3. FMN Plc employees agree that MCS has significant effect on functional level strategy.

Therefore the study established that MCS has vital role in FMN Plc organization's corporate, business and functional strategy levels, and that there are significant relationships between these variables. When MCS practices is implemented it will positively affect the performance of the organization.

6.3. Recommendations

The author recommended the followings:

1. Implement MCS structure that ensures effective communication, support for the subordinates' fringe benefit, Job autonomy that would incite staff for passion, dedication towards an efficient work deliveries and consequently lead to an increase in productive output of the company.

2. Implementation of MCS to help in the improving the knowledge through training and education of staff.

3. Implement MCS to align with human and materials resources to the goal of the organization and translate ends and means into action plans for core competence,

4. Implement MCS driven by automation, development of new technologies, understanding of the industry, deeper and long-lasting customer relationships.

6.4. Limitations

This research focuses on the role of MCS in FMN Plc organization's corporate, business and functional strategies in the Agric-food business industry in Nigeria. Various constraints on the present strategies provided prospective into opportunities for potential studies. The degree to which the effects are generalized in other cases and in general can be limited. As the latest research was focused on the role of MCS in Agric-food industry in Nigeria, additional results could be generated in other industries and perhaps from other geographical region. Also, replications are particularly desirable in other companies, industry and countries. Comparison of different business environment as related to management control system in corporate, business and functional level strategies will give more understanding of the difference between them.

However, the list of limitations presented below were peculiar to FMN Plc:

1. Lack of willingness of the participants to participate in the study. There was high level of distrust expressed by the respondents after due explanations;

2. The impact of the covid-19 also added to discouragement of the desire of respondents who would have simply and easily responded without being persuaded. This was as a result of socio-economic challenges the staff were passing through;

3. Several works has been done in the topic of MCS. Getting a structure and context different to what could commensurate to produce quality research studies was challenging;

4. Timeline was a huge factor that affected the needed number of responses expected to be received. Waiting for weeks to collect, collate and analyze the data was not possible due

to the delay in getting back the number of distributed sample questionnaires which was intended to be used.

6.5. Opportunities for future research

First, it is important that the propositions formulated in this research are verified by other researches. This research could be carried again in the same context, (industry) or in another business organization and industry. They can be validated either by deductive or inductive researches, for the former the propositions tested or for the later the propositions improved in the context of realistic evidence.

Researchers who pick this work to improve on should consider significantly large population sample size, to get an acceptable reliability analysis from all variables. This could produce between Pearson and deviance Chi Squares relationship. There is need to ascertain the difference in Pearson's and deviance Chi square to produce relationship. Studies should also critically investigate the relationship between the impact of MCS in an organisations CS, BS, and FS in view of employer-employees relationship. While further studies could employ qualitative data collection methods, which could help to revealed more in-depth information.

REFERENCES

Abernethy, M. A., & Chua, W. (1996). Field Study of Control System 'Redesign': The Impact of Institutional Process n Strategic Choice. Contemporary Accounting Research, 13(2), 569-606.

Adewuyi, A. O., & Olowookere, A. E. (2013). New Corporate Code and Immediate Performance Change of the Nigerian Firms. (2)(13).The International Journal of Business in Society doi:http://doi.org/10.1108/147207013113166.

Akroyd, C., & Maguire, W. (2011). The Roles of Management Control in a Product Development Setting. Qualitative Research in Accounting & Management, 212-237.

Alvesson, M., & Karreman, D. (2004). Interfaces of Control, Technocratic and Socio-ideological Control in a Global Management Consultancy Firm. Accounting Organisations and Society.

Anthony, R. N. (1965). Planning and Control Systems: A Framework for Analysis. In G. S. Administration. Boston: Graduate School of Business Administration, Harvard University.

Arrow, K. J. (1964). Control in Large Organisations. Management Science, 397-408.

Bessire, D. & Baker, R. (2005). The French Tableau de Bord and the American balanced scorecard: A critical analysis, Critical perspectives on accounting, 16: 645-664.

Bin-Nashwan, S. A., Abdullah, N. S., & Obaid, M. M. (2017). A Review of Literature in Management Control System (MCS), Business Strategy, and Firm's Performance. International Journal of Management Research & Review, 99-112.

Bisbe, J., & Otley, D. (2004). The effects of the interactive use of management control systems on product innovation. Accounting, Organizations and Society, 29, 709–737.

Booner, S. E., & Sprinkle, G. B. (2002). The Effects of Monetary Incentives on Effort and Task Performance: Theories, Evidence, and a Framework for Research. Accounting Organisations & Society, 303-345.

Bruining, H., Bonnet, M., & Wright, M. (2004). Management control systems and strategy change in buyouts. Management Accounting Research, 15, 155–177.

Bunce, P., Fraser, R., & Woodcock, L. (1995). Advanced Budgeting: A Journey to Advanced Management Systems. Management Accounting Research, 6((3)), 253-265.

Burke, W. W., & Litwin, G. H. (1992). A Causal Mode of Organisational Performance & Change. Journal of Management, 523-545.

Chae, B., Olson, D., & Sheu, C. (2014). The impact of supply chain analytics on operational performance: a resource-based view. International Journal of Production Research, 52(16), 4695-4710.

Chenhall, R. H. (2003). Management Control Systems Design within its Organisational Context: Windings from Contingency-based Research and directions for the Future. Accounting Organisations and Society, 127-168.

Chiapello, E. Drechsler, C. Lebas, M. (2001). The TDB, a French Approach to Management Information, unpublished literature.

Clegg, S., Kornberger, M., & Pitsis, T. (2005). Managing and Organisations: An Introduction to Theory and Practice. London: SAGE.

Cochran, W. G. (1977). Sampling Techniques Third Edition.

Daloz, J. (2005, March 4). Nigeria: Trust your Patron, not the Institutions. Nigeria: Comparative Sociology. Retrieved March 2, 2021, from http://doi.org/10.1163/156913305462 1969.

Daneels, E. (2002). The Dynamics of Product Innovation and Firm Competitiveness. Strategic Management Journal, 1095-1121.

Dannson, A. C., Ezedinma, T. R., Wanmbia, B., Bashasha, J. K., & Satorious, K. (2004). Strengthening Farm-agribusiness Linkages in Africa: Summary Results of Five Country Studies in Ghana, Nigeria, Kenya, Uganda and South Africa. Agricultural Management, Marketing and Finance Service (AGSF). Rome: Agricultural Support Systems Division.

Ehikioya, B. I. (2009). Corporate Governance Structure and Firm Performance in Developing Economies: Evidence from Nigeria. (3)(9). Corporate Governance. Retrieved February from http://doi.org/10.1108/14720700910964307.

Fisher, J. G. (1998). Contingency Theory, Management Control Systems and Firm Outcomes: Past Results and Future Directions. Behavioural Research in Accounting, 47-57.

Flamholtz, E. (1983). Accounting, Budgeting and Control Systems in their Organisational Context: Theoretical and Empirical Perspectives. Accounting Organisations and Society, 35-50.

Flamholtz, E., Das, T., & Tsui, A. (1985). Toward an Integrative Framework of Organisational Control. Accounting Organisations and Society, 10((1)), 35-50.

Grant, R. M. (1991). The resource-based theory of competitive advantage: Implications for strategy Formulation. California Management Review, 33, 114-135.

Green, S., & Welsh, M. (1988). Cybernetics and dependence: Refreaming the Control Concept. Academy of Management Review, 13((2)), 287-301.

Govindarajan, V., & Gupta A. K. (1985). Linking Control Systems to Business Unit Strategy: Impact on Performance. Accounting, Organisations and Society, 51-66.

Goyindaran, V. A. (1988). Contingency Approach to Strategy Implementation at the

Business-unit Level: Integrating Administrative Mechanisms with Strategy. Academy of Management Journal, 828-853.

Hansen, S., Otley, D., & Van der Stede, W. (2003). Practice Developments in Budgeting: An Overview and Research Perspective. Journal of Management, 95-116.

Hax A.C. & Majluf, N.S. (2006). Corporate Strategy: The Core Concepts. In: Hahn D., Taylor B. (Eds.) Strategische Unternehmungsplanung — Strategische Unternehmungsführung. 'Springer, Berlin, Heidelberg. Retrieved from: https://doi.org/10.1007/3-540-30763-X_4

Henri, J. F. (2006). Management Control Systems and Strategy: A Resource-based Perspective. Accounting Organisations and Society, 529-558.

Ittner, C. D., & Larcker, D. F. (1998). Innovations in Performance Measurement: Trends and Research Implications. Journal of Management Accounting Research, 205-239.

Ittner, c. (2000). Survey-mastering management: A bigger yardstick for company performance. Financial data has limitations as a measure of company performance. Other measures such as quality may be better at forecasting, but can be difficult to implement, say Christopher Ittner and David Larcker Financial Times; Oct 16, 2000. Financial Times.

Kaplan, R. S., & Norton, D. P. (1992). The Balanced Scorecard: Measures that drive Performance. Harvard Business Review, 71-79.

Kent, M. & Mikael, S. (2004). Business strategy and management control measures for success! Master thesis presented at Blekinge Retrieved from:https: www.diva-portal.org/smash/get/diva 2:830233/FULLTEXT01.pdf.(Accessed 26th February 2021).

Kimura, S. & Mourdoukoutas, P. (2000). Effective integration of management control systems for competing in global industries, European Business Review, 12(1), 41-45.

Kloot, L. (1997) Organizational learning and management control systems: responding to Environmental change, Management Accounting Research, 8(1), 47-73.

Kober, R., Ng, J., & Paul, B. J. (2007).The interrelationship between management control mechanisms and strategy. Management Accounting Research, 18, 425–452.

Koontz H., Weihrich H. (1990). Essentials of management: An International Perspective 8th Editions' p. 4.New Delhi. Tata McGraw Education Private Limited.

Kotane, I. (2015). Evaluating the importance of financial and non-financial indicators for evaluation of company's performance. Management Theory and Studies for Rural Business and Infrastructure Development, 37(1), 80-94.

Ladislav, S. (2015). The Concept of Management Control System and its Relation to Performance Measurement. 16th Annual Conference on Finance and Accounting, ACFA (pp. 141-147).Czech Republic: Elsevier.

Langfield-Smith, K. (1997). Management and Control Systems and Strategy: A Critical Review. Accounting Organisations and Society, 207-232.

Lopez-Valeiras, E., Gonzalez-Sanchez, M. B., & Gomez-Conde, J. (2015). The Effects of the Interactive Use of Management Control Systems on Process and Organisational Innovation. Review of Managerial Science, 1-24.

Lowe, E. A., and J. M. McInnes. "Control in socio-economic organizations: a rationale for the design of management control systems, (section I)." Journal of Management Studies 8.2 (1971): 213-227.

Nunnally, J. C. (1978). An overview of psychological measurement. Clinical diagnosis of mental disorders, 97-146.

Macintosh, N., & Daft, R. (1987). Management Control Systems and Departmental independence An Empirical Study. Accounting Organisations and Society, 12((1)), 23-28.

Magloff, L. (2016, October 19). Examples of Transformational Change. Retrieved from Small Business: http://smallbusiness.chron.com/examples-transformational-change-18261.html.

Malmi, T., & Brown, D. A. (2008). Management control systems as a package—Opportunities, challenges and research directions. Management accounting research, 19(4), 287-300.

Marginson, D. W. (2021). Management Control Systems and their Effects on Strategy Formation at Middle-Management levels: Evidence from a UK Organisation. Strategic Management Journal, 1019-1031.

Merchant, A. Van, S. W. (2007). Management control systems – Performance measurements, Evaluation and incentives, second edition, Edinburgh, England.

Merchant, K., & Van der, S. W. (2007). Management Control Systems (2nd Ed.). Harlow, Ezzex, England: Prentice Hall, Pearson Education Limited.

Mintzberg, H. (1979). The Structuring of Organisations. Englewood Cliffs, NJ: Prentice Hall. Nasiru, A. A., & Rapiah, M. (2017). Management Control System and Nigerian Firms Performance from Institutional Theory Perspective. International Journal of Management Research & Review 941-949.

Otley, D. (1980). The Contingency Theory of Management Accounting: Achievement and Prognosis. Accounting, Organisations and Society.

Peaucelle, Jean-Louis. Henri Fayol, the manager. Routledge, 2015.

Simons, R. (1987). Accounting Control Systems and Business Strategy: AN Empirical Analysis. Accounting Organisations and Society, 357-374.

Simons, R. (1990). The role of management control systems in creating competitive advantage: New perspectives. Accounting, Organizations and Society, 15(1–2), 127–143.

Simmons, R. (1994). How New Top Managers use Control Systems as Levers of Strategic Renewal. Strategic Management Journal, 169-189.

Simmons, R. (1995). Levers of Control. Boston: Harvard University Press.

Simons, R. (2000). Performance measurement and control systems for implementing strategy. Upper Saddle River, New Jersey: Prentice-Hall**.**

Smith, A. (2000). Policy networks and advocacy coalitions: explaining policy change and stability in UK industrial pollution policy? Environment and Planning C: Government and Policy, 18(1), 95-114.

Smriti Chand. (2013). System Approach to Management: Definition, Features and Evaluation Systems as a theory was not originally a business theory.

State, U. D. (2014, March 21). Department of State. Retrieved March 4, 2021, from https://www.state.gov/documents/organization/229183.pdf.

Strank, R. (1983). Management Principles and Practice: A Cybernetic Approach. New York Gordon and Breach Science.

Teemu, M., & David, A. B. (2008). Management Control Systems as a Package - Opportunities, Challenges and Research Directions. Management Accounting Research: Elsevier, 287-300.

Quesado, P. R., & da Costa, C. S. O. (2017). O balanced scorecard e os key performance Indicators: um estudo de caso numa empresa de transportes públicos. Management Control Review, 2(1), 2-19.

Willert, J., Israelsen, P., Rohde, C., & Toldbod, T. (2017). Senior Management Use of Management Control Systems in Large Companies. Corporate Ownership and Control, 14(4), 58-76. https://doi.org/10.22495/cocv14i4art5.

https://www.fmnplc.com/

APPENDIXES

Appendix 1. Sample questionnaires sent out to FMN Plc employees for feedback on demographic questions, and their responses to questions on MCS, CS, BS and FS variables.

Dear respondent,

My name is Madu Udochi, a student at Estonia University of Life Sciences, Tartu and I am studying Agric-food business management. Kindly help me fill in the research questionnaire which I am using to carry out a research on the topic "The role of management control system in an organizations' corporate, business and functional levels (a case study of FMN Plc).The questionnaire is specifically designed for my thesis. The information provided will be treated confidentially. Please feel free to fill in all the boxes provided.

Please mark a check (√) or dash (−) provided in the blank spaces for each question

Gender: Male ☐ Female: ☐ Others: ☐

Age range: Below 25 below ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56 & above ☐

Educational qualification: Bachelors ☐ Masters ☐ PhD ☐ Others ☐

Income level: 100,000 below ☐ 201,000-300,000 ☐ Others ☐

Table 5.30. Questions on MCS variable. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

How do you consider the importance of a management control system to your organization?	Strongly Disagreed	Disagreed	Uncertain	Agreed	Strongly agreed
It help subordinates base their decision on facts and analysis, not politics.					
A Standard that makes decisions to be pushed down to the lowest appropriate level.					
An Issues creative challenges to subordinate rather than define narrow tasks.					
It gives subordinates sufficient autonomy to do their jobs well.					

Appendix 1 continued

Table 5.31. Questions on CS variable. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

Do you think adoption of norms and values has influence in achieving your organization's policy?	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
The Values & mission statements are the guiding actions of subordinates of the organization.					
Employee written guidelines stipulate specific areas for or limits to opportunity search and experimentations.					
It aggregates and summarized measures for (e.g. profit, ROI, ROCE, market share, brand value, brand image, total customer satisfactions.					
It give free access to broad-scope information regarding the performance of business units and the whole company.					

Table 5.32. Questions on BS variable. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

What are the reasons for accomplishment of strategic goals?	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree
The company policy is driven by thorough customer and industry understanding.					
There is a deeper and creative long lasting customer relationship					
There is Increase level in automation, ability to explore, develop new technologies in the organizations' operations.					
Because of the market share of the company's products &services.					

Table 5.33. Questions on BS variable. Source: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels, 2021

How does strategic ends and means are translated into short term action plans?	Strongly disagree	Disagree	Uncertain	Agreed	Strongly agree
Actions plans are decided at the top and given to the lower level to be implemented.					
Subordinate autonomously determine actions within strategic theme across the business					
Plans are based on subordinates' interpretations of how to effect upper level strategy objective					
There is use of predetermined criteria in evaluation and rewarding staff					

Appendix 2. Feedback responses from questions asked on variables

Table 5.34. Respondents responses to the questions on corporate, business and functional level strategies .Sources: Author's conducted survey, Role of MCS in FMN Plc corporate, business and functional levels, 2021

Gender	Age group	Edu Qu	Income	Management control system				Corporate level				Business level				Functional level			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
m	26 to 35	ma	100 below	dsg	dsg	std	std	sta	uct	agr	agr	agr	sta	sta	agr	agr	uct	agr	sta
m	36 to 45	bsc	Oth	dsg	std	dsg	dsg	sta	agr	agr	agr	sta	agr	agr	agr	sta	uct	uct	sta
m	26 to 35	bsc	100 below	dsg	dsg	dsg	dsg	sta	sta	agr	uct	sta	sta	agr	sta	sta	sta	agr	sta
m	36 to 45	bsc	100 below	std	std	std	std	dsg	std	dsg	std	std	std	std	std	std	std	std	std
f	36 to 45	bsc	100 below	dsg	std	dsg	dsg	sta	uct	dsg	dsg	agr	sta	agr	agr	std	std	uct	sta
f	36 to 45	bsc	100 below	dsg	dsg	dsg	dsg	sta	agr	sta	agr	std	std	std	std	dsg	std	std	std
f	36 to 45	oth	100 below	std	std	std	std	std	std	std	std	std	std	std	std	std	std	std	std
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	dsg	uct	agr	agr	sta	sta	sta	agr	sta	sta
f	36 to 45	oth	201 to 300	std	std	std	std	sta	sta	sta	sta	std	std	std	std	dsg	std	std	std
m	36 to 45	bsc	100 below	dsg	dsg	dsg	dsg	sta	uct	uct	uct	sta	sta	sta	sta	agr	sta	agr	uct
f	26 to 35	oth	100 below	dsg	dsg	std	dsg	agr	std	dsg	agr	agr	agr	agr	sta	sta	agr	agr	agr
f	46 to 55	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	uct	agr	agr	sta	sta	sta	sta
m	26 to 35	bsc	101 to 200	std	std	std	std	sta	sta	sta	sta	agr	agr	agr	agr	sta	sta	sta	sta
f	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta
f	26 to 35	bsc	100 below	dsg	dsg	dsg	dsg	sta	sta	sta	agr	sta	agr	sta	agr	sta	std	agr	agr
m	56 & above	PhD	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	agr	agr	sta
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
m	46 to 55	oth	101 to 200	dsg	std	std	std	sta	agr	agr	uct	agr	uct	agr	agr	std	std	std	uct
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	sta	uct	agr	sta	agr	sta	sta	agr	agr	std	std	uct
m	26 to 35	bsc	100 below	dsg	std	std	std	agr	uct	sta	sta	agr	agr	uct	agr	sta	std	std	uct
m	36 to 45	ma	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	sta	agr	agr	agr	uct	uct	agr
m	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	sta	sta	agr	sta	agr	sta	sta	std	uct	uct

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
m	46 to 55	oth	101 to 200	std	std	std	std	agr	agr	dsg	sta	agr	agr	sta	agr	agr	std	uct	agr
f	26 to 35	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	dsg	agr	agr	sta	agr	agr	agr	uct	std	agr
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	uct	agr	agr	sta	agr	agr	agr	uct	uct	agr
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	agr	agr	sta	agr	sta	agr	sta	sta	agr	agr
m	36 to 45	bsc	101 to 200	std	std	std	std	agr	agr	agr	agr	agr	agr	agr	agr	sta	std	std	uct
m	26 to 35	bsc	100 below	std	std	std	std	dsg	std	std	dsg	std	std	dsg	std	std	std	std	std
f	36 to 45	bsc	100 below	dsg	std	std	dsg	std	agr	dsg	dsg	agr	sta	sta	dsg	sta	uct	std	agr
m	46 to 55	oth	Oth	dsg	std	dsg	dsg	sta	agr	uct	dsg	agr	sta	uct	uct	sta	uct	agr	agr
m	26 to 35	oth	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
f	26 to 35	oth	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
m	36 to 45	ma	Oth	dsg	dsg	std	std	agr	agr	agr	agr	agr	sta	agr	agr	agr	uct	agr	agr
f	36 to 45	bsc	100 below	dsg	dsg	std	std	sta	sta	sta	sta	sta	agr	agr	uct	agr	std	std	std
m	46 to 55	oth	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	std	dsg	dsg	std	agr	std	std	std
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	uct	uct	agr	dsg	std	std	uct	agr	agr	agr	agr
f	26 to 35	ma	201 to 300	dsg	dsg	dsg	dsg	agr	sta	agr	sta	uct	agr	agr	uct	sta	agr	sta	agr
m	26 to 35	bsc	100 below	std	std	std	std	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct
f	36 to 45	bsc	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
f	26 to 35	oth	100 below	dsg	dsg	dsg	dsg	sta	agr	agr	agr	agr	sta	sta	sta	sta	sta	agr	agr
f	46 to 55	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	sta	sta	sta	agr	agr	sta	sta	sta	sta	sta	sta
f	56 & above	bsc	100 below	dsg	dsg	dsg	dsg	sta	agr	agr	agr	sta	sta	sta	agr	sta	sta	agr	agr
m	26 to 35	oth	100 below	std	dsg	dsg	dsg	sta	agr	sta	sta	agr	agr	sta	agr	sta	agr	agr	agr
m	26 to 35	bsc	100 below	dsg	std	dsg	dsg	agr	uct	uct	sta	agr	std	uct	uct	std	std	std	uct
m	36 to 45	bsc	100 below	std	dsg	dsg	dsg	agr	sta	sta	sta	agr	uct	agr	agr	agr	agr	agr	agr
f	46 to 55	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	sta	sta	agr	agr	sta	uct	agr	agr	agr	agr
f	36 to 45	PhD	101 to 200	dsg	std	std	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	std	std	std	std
m	26 to 35	ma	100 below	dsg	dsg	std	std	agr	std	agr	uct	std	std	std	std	sta	uct	agr	agr
m	46 to 55	oth	100 below	std	std	std	std	dsg	std	std	dsg	std	dsg	dsg	std	std	std	std	std

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
t	25 below	ma	201 to 300	std	std	std	std	agr	sta	std	dsg	std	std	dsg	dsg	std	std	std	sta
oth	26 to 35	PhD	100 below	std	std	std	std	dsg	std	dsg	std	std	std	std	dsg	std	std	std	std
f	26 to 35	ma	201 to 300	std	std	dsg	dsg	std	std	dsg	dsg	dsg	dsg	dsg	dsg	dsg	agr	agr	uct
f	36 to 45	oth	201 to 300	std	std	std	std	std	std	dsg	std	dsg	std	dsg	dsg	std	std	agr	agr
m	46 to 55	ma	100 below	dsg	std	std	std	dsg	std	uct	agr	dsg	agr	dsg	uct	dsg	std	std	std
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	uct	agr	agr	agr	agr	agr	agr	agr
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	uct	uct	agr	agr	sta	uct	agr	uut	agr	agr
f	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	uct	agr	agr	agr	agr	uct	agr	agr	uct	uct
m	56 & above	ma	Oth	dsg	dsg	dsg	dsg	sta	agr	uct	sta	uct	agr	agr	uct	uct	agr	uct	agr
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	uct	agr	agr
m	36 to 45	oth	100 below	std	std	std	std	agr	uct	uct	uct	agr	agr	agr	agr	uct	std	std	std
m	56 & above	oth	100 below	std	std	std	std	agr	uct	uct	agr	dsg	uct	uct	dsg	uct	uct	agr	agr
m	46 to 55	oth	100 below	std	std	std	std	agr	uct	dsg	uct	uct	agr	agr	std	dsg	std	std	uct
f	36 to 45	oth	100 below	dsg	std	std	std	agr	uct	uct	agr	uct	uct	uct	dsg	uct	uct	uct	uct
oth	26 to 35	oth	100 below	std	std	dsg	std	agr	uct	uct	agr	agr	uct	agr	uct	uct	std	std	std
f	36 to 45	oth	100 below	std	std	std	std	std	dsg	std	dsg	std	dsg	std	dsg	dsg	std	std	std
f	36 to 45	oth	100 below	std	std	std	std	std	dsg	std	dsg	std	dsg	std	std	std	std	std	std
oth	56 & above	oth	100 below	std	std	std	std	dsg	dsg	std	uct	dsg	uct	uct	uct	std	std	uct	uct
f	46 to 55	oth	100 below	std	std	std	std	std	dsg	dsg	std	dsg	uct	uct	uct	uct	uct	std	std
m	36 to 45	oth	100 below	std	std	std	std	std	dsg	std	dsg	std	dsg	dsg	std	uct	uct	uct	uct
m	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	uct	uct	uct	uct	uct	uct	uct	uct
f	46 to 55	bsc	201 to 300	dsg	dsg	dsg	dsg	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct	uct
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	dsg	dsg	dsg	std	uct	agr	uct	uct	uct	uct	uct	uct
m	56 & above	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	sta	agr	uct	uct	agr	uct
f	36 to 45	oth	100 below	std	dsg	dsg	dsg	uct	agr	uct	uct	uct agr		agr	dsg	agr	agr	agr	agr
m	46 to 55	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	uct	uct	uct	uct	dsg	std	std	std
f	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	uct	uct	agr	uct	uct	agr	agr	agr	dsg	std	std	std

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
m	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	uct	agr	uct	agr	uct	uct	agr	agr	agr	agr
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	agr	sta	std	std	agr	agr	agr	dsg	std	std	std	std
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	uct	agr	uct	uct	std	dsg	agr	uct	dsg	std	std	agr
m	46 to 55	ma	101 to 200	dsg	std	dsg	dsg	agr	agr	agr	agr	agr	agr	sta	agr	agr	agr	agr	agr
f	46 to 55	PhD	Oth	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	sta	sta	agr	agr	sta	agr	agr
m	46 to 55	PhD	Oth	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	agr	agr	sta
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	agr	sta	agr
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	sta	agr	sta	agr	sta	agr	sta
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	std	std	dsg	dsg	dsg	std	dsg	dsg	agr	dsg	std	uct	agr
m	36 to 45	ma	101 to 200	dsg	dsg	std	dsg	std	dsg	agr	sta	agr	agr	agr	agr	agr	agr	sta	agr	sta
oth	36 to 45	oth	201 to 300	std	dsg	dsg	dsg	uct	uct	uct	uct	dsg	dsg	dsg	dsg	dsg	dsg	std	agr	agr
m	46 to 55	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
f	46 to 55	PhD	201 to 300	dsg	dsg	dsg	dsg	sta	agr	agr	agr	agr	agr	sta	agr	dsg	agr	uct	uct
f	36 to 45	ma	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
f	26 to 35	ma	100 below	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	dsg	std	std	std
f	36 to 45	PhD	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
m	26 to 35	PhD	201 to 300	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
oth	46 to 55	oth	100 below	dsg	dsg	std	dsg	dsg	dsg	dsg	std	uct	uct	uct	agr	agr	agr	agr	agr
f	36 to 45	PhD	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	sta	sta	sta	sta	uct	agr	agr	uct
f	36 to 45	ma	100 below	dsg	dsg	dsg	dsg	agr	sta	agr	sta	sta	sta	agr	sta	sta	agr	sta	sta
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	agr	sta	agr	sta	uct	uct	uct	agr	uct	sta
f	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	uct	agr	sta	sta	sta	agr	sta	sta	dsg	std	std	std
f	36 to 45	bsc	101 to 200	dsg	dsg	dsg	std	agr	sta	agr	agr	agr	dsg	agr	uct	sta	std	agr	agr
m	26 to 35	oth	101 to 200	std	std	dsg	std	dsg	std	std	dsg	std	dsg	std	std	std	std	std	std
m	26 to 35	oth	201 to 300	std	std	std	std	dsg	dsg	agr	agr	std	dsg	std	std	dsg	std	uct	std
m	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	sta	uct	agr	agr	uct	sta	agr	sta	sta

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
f	36 to 45	bsc	201 to 300	dsg	dsg	dsg	dsg	agr	sta	dsg	agr	agr	uct	uct	agr	sta	agr	uct	std
f	36 to 45	ma	101 to 200	dsg	dsg	dsg	std	sta	agr	std	std	dsg	uct	agr	uct	dsg	std	std	std
m	36 to 45	ma	101 to 200	std	std	std	dsg	sta	agr	uct	dsg	dsg	uct	dsg	uct	dsg	agr	uct	sta
m	26 to 35	ma	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta
m	36 to 45	bsc	201 to 300	std	std	std	dsg	std	dsg	uct	agr	std	dsg	dsg	std	uct	std	std	uct
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	std	uct	agr	uct	dsg	agr	uct	uct	uct	agr	uct	agr	uct
f	36 to 45	ma	201 to 300	dsg	std	dsg	std	agr	agr	agr	sta	sta	agr	sta	agr	agr	uct	agr	uct
f	46 to 55	bsc	101 to 200	dsg	dsg	std	dsg	agr	sta	agr	sta	sta	uct	sta	uct	sta	uct	sta	uct
m	26 to 35	oth	100 below	std	std	std	std	dsg	agr	dsg	agr	dsg	agr	uct	uct	dsg	std	std	std
m	56 & above	oth	201 to 300	dsg	dsg	dsg	dsg	agr	sta	agr	agr	agr	agr	sta	sta	uct	std	uct	std
f	26 to 35	ma	101 to 200	dsg	std	dsg	dsg	dsg	dsg	dsg	std	uct	dsg	dsg	uct	agr	agr	uct	sta
m	36 to 45	ma	201 to 300	std	std	std	std	sta	agr	uct	dsg	agr	agr	agr	agr	dsg	std	std	std
m	46 to 55	bsc	201 to 300	dsg	dsg	dsg	dsg	agr	sta	agr	sta	sta	agr	sta	agr	sta	agr	sta	agr
f	26 to 35	PhD	Oth	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta	sta
f	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	agr	agr	agr	agr	sta	agr	sta	sta	sta	sta	sta	sta
m	46 to 55	bsc	201 to 300	std	std	std	dsg	sta	agr	sta	agr	sta	agr	sta	agr	sta	agr	sta	agr
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	sta	sta	agr	sta	agr	sta	agr	sta	sta
m	56 & above	ma	201 to 300	dsg	dsg	dsg	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	agr	agr	agr	agr	agr	agr	agr	agr
f	26 to 35	ma	201 to 300	std	std	std	std	uct	agr	uct	agr	std	dsg	uct	agr	agr	uct	std	std
m	46 to 55	PhD	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	agr	sta	agr	sta	sta	sta	agr	sta	sta
f	36 to 45	PhD	201 to 300	dsg	std	std	std	std	dsg	agr	agr	dsg	uct	dsg	agr	dsg	std	std	agr
f	46 to 55	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	agr	sta	agr	sta	agr	agr	agr	sta	agr
f	46 to 55	ma	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	uct	uct	uct	dsg	std	std	std
m	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	sta	sta	agr	sta	sta	sta	agr	sta	agr
f	46 to 55	bsc	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	agr	sta	agr	sta	sta	sta	agr	sta	sta
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	dsg	dsg	dsg	dsg	dsg	std	std	dsg	dsg	std	std	std

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
m	36 to 45	bsc	201 to 300	std	std	std	std	agr	agr	agr	sta	dsg	dsg	std	dsg	dsg	std	std	uct
m	36 to 45	ma	101 to 200	std	dsg	std	dsg	uct	agr	uct	agr	agr	sta	agr	sta	agr	uct	uct	agr
f	56 & above	ma	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	agr	agr	agr	agr	agr	sta	sta
m	46 to 55	ma	100 below	std	std	dsg	dsg	sta	agr	sta	agr	agr	sta	agr	sta	dsg	uct	std	uct
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	sta	agr	sta	agr	sta	uct	agr	uct	agr
m	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	agr	uct	uct	uct	sta	agr	uct	std	std
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	sta	sta	sta	sta	agr	agr	uct	uct	dsg	std	std	std
m	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	sta	sta	agr	agr	sta	agr	dsg	std	std	std
f	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	agr	std	std	dsg	dsg	sta	std	std	std
m	26 to 35	bsc	100 below	dsg	std	dsg	std	agr	agr	agr	sta	dsg	dsg	std	dsg	uct	agr	sta	uct
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	sta	uct	uct	dsg	uct	sta	sta	sta	agr
m	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	agr	agr	sta	agr	agr	agr	agr	agr	agr	sta	agr
m	26 to 35	ma	101 to 200	dsg	std	std	std	dsg	dsg	dsg	std	dsg	dsg	dsg	dsg	dsg	std	std	std
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	sta	agr	sta	agr	agr	sta	sta
f	56 & above	bsc	201 to 300	dsg	dsg	dsg	dsg	dsg	dsg	dsg	dsg	agr	agr	sta	sta	sta	agr	sta	sta
f	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	agr	agr	uct	agr	uct	sta	agr	sta	agr
f	36 to 45	ma	100 below	dsg	dsg	dsg	dsg	dsg	dsg	dsg	dsg	agr	agr	uct	sta	uct	agr	sta	uct
m	26 to 35	ma	101 to 200	dsg	dsg	dsg	dsg	sta	sta	sta	sta	dsg	std	dsg	dsg	uct	uct	uct	uct
m	56 & above	bsc	100 below	dsg	std	dsg	dsg	sta	sta	sta	sta	dsg	dsg	dsg	dsg	dsg	std	std	std
f	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	agr	dsg	dsg	std	agr	std	std	std
m	36 to 45	bsc	101 to 200	dsg	dsg	std	dsg	sta	agr	sta	agr	sta	agr	sta	sta	sta	agr	sta	sta
f	26 to 35	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	sta	agr	sta	agr	agr	agr	uct	agr	agr	agr	agr
f	26 to 35	oth	101 to 200	dsg	dsg	dsg	dsg	agr	agr	sta	agr	agr	sta	agr	sta	agr	sta	agr	sta
m	56 & above	oth	201 to 300	dsg	dsg	dsg	dsg	agr	sta	sta	agr	agr	agr	sta	agr	agr	sta	sta	agr
m	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	sta	agr	sta	agr	agr	sta	agr	sta	agr	sta	uct	sta
m	26 to 35	bsc	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	sta	agr	sta	agr	sta	agr	sta	agr	sta
f	25 below	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	agr	agr	sta	agr	sta	sta	agr	sta	agr

Appendix 2 continued

Table 5.34 continued

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
m	36 to 45	bsc	201 to 300	dsg	dsg	dsg	dsg	sta	sta	agr	sta	agr	sta	agr	sta	sta	agr	agr	sta
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	sta	agr	sta	agr	sta	sta	sta	sta	sta	sta	agr	sta
f	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	sta	agr	sta	uct	std	uct	std
m	26 to 35	bsc	201 to 300	dsg	dsg	dsg	dsg	agr	sta	agr	sta	dsg	uct	dsg	dsg	dsg	std	std	std
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	agr	sta	sta	agr	agr	sta	agr	sta	agr	sta	agr	sta
m	36 to 45	bsc	101 to 200	dsg	dsg	dsg	dsg	sta	agr	uct	agr	agr	agr	agr	agr	dsg	std	uct	agr
m	36 to 45	ma	101 to 200	dsg	dsg	dsg	dsg	agr	sta	agr	sta	dsg	dsg	uct	dsg	uct	uct	uct	uct
f	56 & above	oth	Oth	dsg	dsg	dsg	std	agr	agr	agr	agr	agr	sta	agr	sta	uct	uct	uct	uct
m	46 to 55	bsc	Oth	dsg	dsg	dsg	dsg	agr	sta	agr	sta	agr	sta	agr	sta	agr	agr	agr	agr
m	46 to 55	bsc	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	agr	sta	agr	sta	agr	sta	agr	agr
f	56 & above	bsc	201 to 300	dsg	dsg	std	dsg	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr	agr
f	26 to 35	oth	201 to 300	dsg	dsg	std	dsg	uct	std	std	std	agr	agr	sta	sta	uct	agr	uct	agr
m	36 to 45	bsc	Oth	dsg	dsg	dsg	dsg	agr	sta	agr	agr	agr	agr	uct	agr	agr	uct	agr	uct
m	56 & above	oth	201 to 300	dsg	dsg	dsg	dsg	agr	agr	agr	sta	agr	sta	sta	sta	agr	uct	agr	sta
f	46 to 55	bsc	201 to 300	dsg	dsg	dsg	std	agr	agr	dsg	std	agr	agr	agr	agr	agr	agr	agr	std
m	36 to 45	ma	201 to 300	dsg	dsg	dsg	dsg	dsg	uct	dsg	uct	agr	agr	agr	sta	agr	agr	sta	sta
m	46 to 55	bsc	101 to 200	dsg	dsg	std	std	uct	agr	agr	uct	sta	sta	sta	sta	agr	uct	uct	agr
m	46 to 55	bsc	101 to 200	dsg	std	std	dsg	uct	agr	sta	agr	sta	sta	sta	sta	agr	agr	agr	agr
m	36 to 45	ma	101 to 200	std	dsg	dsg	std	sta	sta	sta	sta	uct	agr	uct	agr	agr	agr	uct	agr
m	46 to 55	ma	201 to 300	dsg	dsg	dsg	dsg	sta	sta	sta	sta	sta	sta	sta	sta	agr	sta	agr	sta
m	36 to 45	bsc	201 to 300	dsg	dsg	dsg	dsg	agr	sta	agr	sta	sta	sta	sta	sta	agr	sta	agr	agr

Notes: 1. ‘’m’’ means male

2. ‘’F’’ means female.

3. ‘’Oth’’ means others.

4. ‘’bsc’’ means bachelors.

5. ‘’ma’’ means masters.

6. ‘’dsg’’ means disagree.
7. ‘’std.’’ means strongly disagree.
8. ‘’uct’’ means uncertain.
9. ’’agr.’’ means agree.
10. ‘’sta’’ means strongly agree.
11. Income level were all measures in Naira. 408 naira equivalent of 1 euro. And income are in thousands.

Appendix 3. Conversion of responses into numbers for SPSS data processing

Table 5.35. Values representing converted responses into numbers. Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

Gender	Age grp	Edu Qual	Income level	Management control system				Corporate level strategy				Business level strategy				Functional level strategy			
				Q1	Q2	Q3	Q3	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	2	2	1	5	4	3	2	5	3	4	4	4	5	5	4	4	3	4	5
1	3	1	4	4	3	4	4	5	4	4	4	5	4	4	4	5	3	3	5
1	2	1	1	4	5	5	5	5	5	4	3	5	5	4	5	5	5	4	5
1	3	1	1	2	2	1	2	2	1	2	1	1	1	1	1	1	1	1	1
2	3	1	1	4	3	4	4	5	3	2	2	4	5	4	4	1	1	3	5
2	3	1	1	5	4	4	5	5	4	5	4	1	1	1	1	2	1	1	1
2	3	4	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	4	2	3	5	5	5	4	5	4	2	3	4	4	5	5	5	4	5	5
2	3	4	3	1	1	1	1	5	5	5	5	1	1	1	1	2	1	1	1
1	3	1	1	4	4	5	4	5	3	3	3	5	5	5	5	4	5	4	3
2	2	4	1	4	4	1	4	4	1	2	4	4	4	4	5	5	4	4	4
2	4	1	2	4	4	4	4	5	5	5	5	5	3	4	4	5	5	5	5
1	2	1	2	2	2	3	3	5	5	5	5	4	4	4	4	5	5	5	5
2	3	1	2	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
2	2	1	1	4	4	4	4	5	5	5	4	5	4	5	4	5	1	4	4
1	5	3	3	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5
1	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1	4	4	2	4	3	2	3	5	4	4	3	4	3	4	4	1	1	1	3
1	3	2	3	5	5	4	5	5	3	4	5	4	5	5	4	4	1	1	3
1	2	1	1	5	1	2	2	4	3	5	5	4	4	3	4	5	1	1	3
1	3	2	1	4	4	5	4	4	4	4	4	4	5	4	4	4	3	3	4
1	3	1	2	4	5	4	4	4	4	5	5	4	5	4	5	5	1	3	3

Appendix 3 continued

Table 5.35 continued

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	4	4	2	3	3	3	2	4	4	2	5	4	4	5	4	4	1	3	4
2	2	2	3	4	4	4	4	5	4	2	4	4	5	4	4	4	3	1	4
1	2	1	2	4	4	4	4	5	4	3	4	4	5	4	4	4	3	3	4
1	4	2	3	5	5	5	4	5	4	4	4	5	4	5	4	5	5	4	4
1	3	1	2	2	3	1	2	4	4	4	4	4	4	4	4	5	1	1	3
1	2	1	1	1	2	1	1	2	1	1	2	1	1	2	1	1	1	1	1
2	3	1	1	5	2	1	4	1	4	2	2	4	5	5	2	5	3	1	4
1	4	4	4	4	2	4	4	5	4	3	2	4	5	3	3	5	3	4	4
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2	3	1	1	5	5	3	1	5	5	5	5	5	4	4	3	4	1	1	1
1	4	4	2	4	4	4	4	4	4	4	4	1	2	2	1	4	1	1	1
1	2	1	2	4	5	4	4	4	3	3	4	2	1	1	3	4	4	4	4
2	2	2	3	5	5	5	5	4	5	4	5	3	4	4	3	5	4	5	4
1	2	1	1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
2	3	1	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	2	4	1	5	5	4	4	5	4	4	4	4	5	5	5	5	5	4	4
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1	2	4	1	3	5	5	4	5	4	5	5	4	4	5	4	5	4	4	4
1	2	1	1	4	3	4	5	4	3	3	5	4	1	3	3	1	1	1	3
1	3	1	1	3	4	4	4	4	5	5	5	4	3	4	4	4	4	4	4
2	4	2	2	4	4	4	4	4	4	5	5	4	4	5	3	4	4	4	4
2	3	3	2	4	2	2	4	4	4	4	4	4	4	4	4	1	1	1	1

Appendix 3 continued

Table 5.35 continued

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
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1	4	4	1	1	2	2	1	2	1	1	2	1	2	2	1	1	1	1	1
2	1	2	3	2	2	1	1	4	5	1	2	1	1	2	2	1	1	1	5
3	2	3	1	2	2	2	2	2	1	2	1	1	1	1	2	1	1	1	1
2	2	2	3	2	3	4	4	1	1	2	2	2	2	2	2	2	4	4	3
2	3	4	3	2	2	2	3	1	1	2	1	2	1	2	2	1	1	4	4
1	4	2	1	5	1	3	3	2	1	3	4	2	4	2	3	2	1	1	1
1	2	2	2	5	5	4	5	4	4	4	4	3	4	4	4	4	4	4	4
1	3	2	3	4	4	5	4	5	4	3	3	4	4	5	3	4	3	4	4
2	3	1	2	4	4	4	4	5	4	3	4	4	4	4	3	4	4	3	3
1	5	2	4	5	5	5	5	5	4	3	5	3	4	4	3	3	4	3	4
1	4	2	3	4	5	4	4	4	4	4	4	4	4	4	4	4	3	4	4
1	3	4	1	3	3	3	3	4	3	3	3	4	4	4	4	3	1	1	1
1	5	4	1	3	3	3	3	4	3	3	4	2	3	3	2	3	3	4	4
1	4	4	1	3	3	3	3	4	3	2	3	3	4	4	1	2	1	1	3
2	3	4	1	4	3	3	3	4	3	3	4	3	3	3	2	3	3	3	3
3	2	4	1	3	3	4	3	4	3	3	4	4	3	4	3	3	1	1	1
2	3	4	1	2	1	1	2	1	2	1	2	1	2	1	2	2	1	1	1
2	3	4	1	2	1	1	1	1	2	1	2	1	2	1	1	1	1	1	1
3	5	4	1	1	1	1	1	2	2	1	3	2	3	3	3	1	1	3	3
2	4	4	1	1	3	2	3	1	2	2	1	2	3	3	3	3	3	1	1
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2	4	1	3	4	4	4	4	3	3	3	3	3	3	3	3	3	3	3	3
1	3	2	3	5	5	5	5	2	2	2	1	3	4	3	3	3	3	3	3

Appendix 3 continued

Table 5.35 continued

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
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2	3	4	1	3	4	4	4	3	4	3	3	3	4	4	2	4	4	4	4
1	4	1	2	4	5	4	4	4	4	4	4	3	3	3	3	2	1	1	1
2	4	2	3	4	4	4	4	3	3	4	3	3	4	4	4	2	1	1	1
1	3	2	2	5	5	5	5	4	4	3	4	3	4	3	3	4	4	4	4
1	3	2	3	5	4	4	4	4	5	1	1	4	4	4	2	1	1	1	1
1	2	2	2	4	5	4	5	3	4	3	3	1	2	4	3	2	1	1	4
1	4	2	2	5	3	4	5	4	4	4	4	4	4	5	4	4	4	4	4
2	4	3	4	4	5	5	4	4	5	4	5	4	5	5	4	4	5	4	4
1	4	3	4	5	5	5	5	5	5	5	5	5	5	5	5	5	4	4	5
1	4	2	3	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	4
1	2	1	2	4	5	5	4	4	5	4	5	4	5	4	5	4	5	4	5
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3	3	4	3	2	4	4	4	3	3	3	3	2	2	2	2	2	1	4	4
1	4	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
2	4	3	3	4	4	4	4	5	4	4	4	4	4	5	4	2	4	3	3
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2	2	2	1	4	4	4	4	4	4	4	4	4	4	4	4	2	1	1	1
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2	3	3	2	4	4	4	4	4	5	4	5	5	5	5	5	3	4	4	3
2	3	2	1	4	5	5	4	4	5	4	5	5	5	4	5	5	4	5	5
1	2	2	2	4	4	5	4	5	4	4	5	4	5	3	3	3	4	3	5

Appendix 3 continued

Table 5.35 continued

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2	2	2	2	4	4	5	5	3	4	5	5	5	4	5	5	2	1	1	1
2	3	1	2	4	4	4	2	4	5	4	4	4	2	4	3	5	1	4	4
1	2	4	2	1	2	5	2	2	1	1	2	1	2	1	1	1	1	1	1
1	2	4	3	1	3	1	1	2	2	4	4	1	2	1	1	2	1	3	1
1	3	2	2	4	4	4	4	4	4	4	5	3	4	4	3	5	4	5	5
2	3	2	2	4	4	3	3	3	3	3	3	5	2	4	4	2	4	4	5
2	3	1	3	5	4	5	5	4	5	2	4	4	3	3	4	5	4	3	1
2	3	2	2	4	4	4	3	5	4	1	1	2	3	4	3	2	1	1	1
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1	2	2	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
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1	5	4	3	4	5	4	5	4	5	4	4	4	4	5	5	3	1	3	1
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1	4	2	3	5	4	5	4	5	4	5	5	5	4	5	4	5	4	5	5
1	5	2	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
1	3	2	3	5	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4

Appendix 3 continued

Table 5.35 continued

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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1	4	3	3	5	4	5	5	5	4	5	4	5	4	5	5	5	4	5	5
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1	3	2	2	5	4	5	4	5	4	5	5	5	4	5	5	5	4	5	4
2	4	1	3	5	4	5	5	5	4	5	4	5	4	5	5	5	4	5	5
1	3	2	3	5	4	5	4	2	2	2	2	2	1	1	2	2	1	1	1
1	3	1	3	3	2	3	3	4	4	4	5	2	2	1	2	2	1	1	3
1	3	2	2	3	4	3	4	3	4	3	4	4	5	4	5	4	3	3	4
2	5	2	2	4	4	5	5	4	5	4	5	4	4	4	4	4	4	5	5
1	4	2	1	3	3	4	4	5	4	5	4	4	5	4	5	2	3	1	3
1	2	1	2	4	5	4	5	5	4	5	5	4	5	4	5	3	4	3	4
1	3	1	2	4	5	4	4	5	4	5	4	3	3	3	5	4	3	1	1
1	2	2	2	4	5	4	4	5	5	5	5	4	4	3	3	2	1	1	1
1	3	1	2	5	4	5	4	4	4	5	5	4	4	5	4	2	1	1	1
2	2	2	2	4	5	5	4	5	4	5	4	1	1	2	2	5	1	1	1
1	2	1	1	4	3	5	3	4	4	4	5	2	2	1	2	3	4	5	3
1	2	1	2	4	5	4	5	5	4	5	5	3	3	2	3	5	5	5	4
1	2	1	2	4	4	4	4	4	4	4	5	4	4	4	4	4	4	5	4
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1	2	2	2	5	4	5	5	4	5	4	5	4	5	4	5	4	4	5	5
2	5	1	3	4	5	5	4	2	2	2	2	4	4	5	5	5	4	5	5
2	3	2	2	4	5	4	5	5	4	5	4	4	3	4	3	5	4	5	4

Appendix 3 continued

Table 5.35 continued

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
2	3	2	1	5	4	5	4	2	2	2	2	4	4	3	5	3	4	5	3
1	2	2	2	4	5	4	5	5	5	5	5	2	1	2	2	3	3	3	3
1	5	1	1	5	1	4	4	5	5	5	5	2	2	2	2	2	1	1	1
2	3	2	3	5	5	5	5	5	5	5	5	4	2	2	1	4	1	1	1
1	3	1	2	4	4	3	4	5	4	5	4	5	4	5	5	5	4	5	5
2	2	1	2	4	5	5	4	5	5	4	5	4	4	4	3	4	4	4	4
2	2	4	2	4	4	4	4	4	4	5	4	4	5	4	5	4	5	4	5
1	5	4	3	4	5	4	5	4	5	5	4	4	4	5	4	4	5	5	4
1	3	2	2	5	5	5	5	5	4	5	4	4	5	4	5	4	5	3	5
1	2	1	3	5	4	5	4	5	4	5	5	4	5	4	5	4	5	4	5
2	1	2	3	5	4	5	4	5	4	5	4	4	5	4	5	5	4	5	4
1	3	1	3	5	4	5	4	5	5	4	5	4	5	4	5	5	4	4	5
1	3	2	3	5	4	4	5	5	4	5	4	5	5	5	5	5	5	4	5
2	3	1	2	5	4	5	5	4	5	4	5	4	5	4	5	3	1	3	1
1	2	1	3	5	4	5	4	4	5	4	5	2	3	2	2	2	1	1	1
1	3	2	3	5	4	4	5	4	5	5	4	4	5	4	5	4	5	4	5
1	3	1	2	4	5	5	5	5	4	3	4	4	4	4	4	2	1	3	4
1	3	2	2	4	5	4	5	4	5	4	5	2	2	3	2	3	3	3	3
2	5	4	4	4	5	4	3	4	4	4	4	4	5	4	5	3	3	3	3
1	4	1	4	5	4	5	4	4	5	4	5	4	5	4	5	4	4	4	4
1	4	1	3	4	4	4	4	5	5	5	5	4	5	4	5	4	5	4	4
2	5	1	3	4	5	3	4	4	4	4	4	4	4	4	4	4	4	4	4
2	2	4	3	4	4	3	4	3	1	1	1	4	4	5	5	3	4	3	4
1	3	1	4	4	4	4	4	4	5	4	4	4	4	3	4	4	3	4	3

Appendix 3 continued

Table 5.35 continued

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
1	5	4	3	4	4	4	4	4	4	4	5	4	5	5	5	4	3	4	5
2	4	1	3	4	5	4	3	4	4	2	1	4	4	4	4	4	4	4	1
1	3	2	3	4	4	4	4	2	3	2	3	4	4	4	5	4	4	5	5
1	4	1	2	4	5	2	2	3	4	4	3	5	5	5	5	4	3	3	4
1	4	1	2	4	3	3	4	3	4	5	4	5	5	5	5	4	4	4	4
1	3	2	2	3	4	4	3	5	5	5	5	3	4	3	4	4	4	3	4
1	4	2	3	4	4	4	4	5	5	5	5	5	5	5	5	4	5	4	5
1	3	1	3	5	4	4	5	4	5	4	5	5	5	5	5	4	5	4	4

Appendix 4. MCS variable response in each scale.

Table 5.36. MCS response breakdown showing numbers and percentages received in each scale.Source: Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

		Frequency	Percentage	Cumulative Percentage
Valid	**Strongly disagree or disagree**	102	14	14
	Uncertain	88	13	27
	Strongly agree or agree	522	73.	100.0
	Total	178	100.0	

Appendix 5. Charts showing graphical illustration of responses from questions on MCS and corporate, business and functional level strategies.

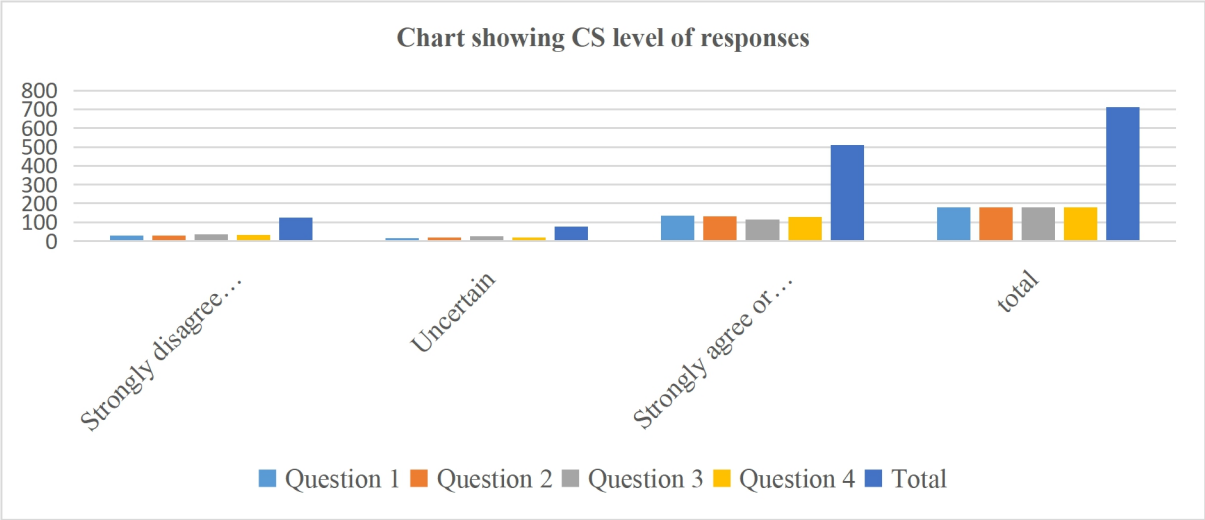

Figure 5.1. Chart showing the visual position of each question response category of corporate Level strategy Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

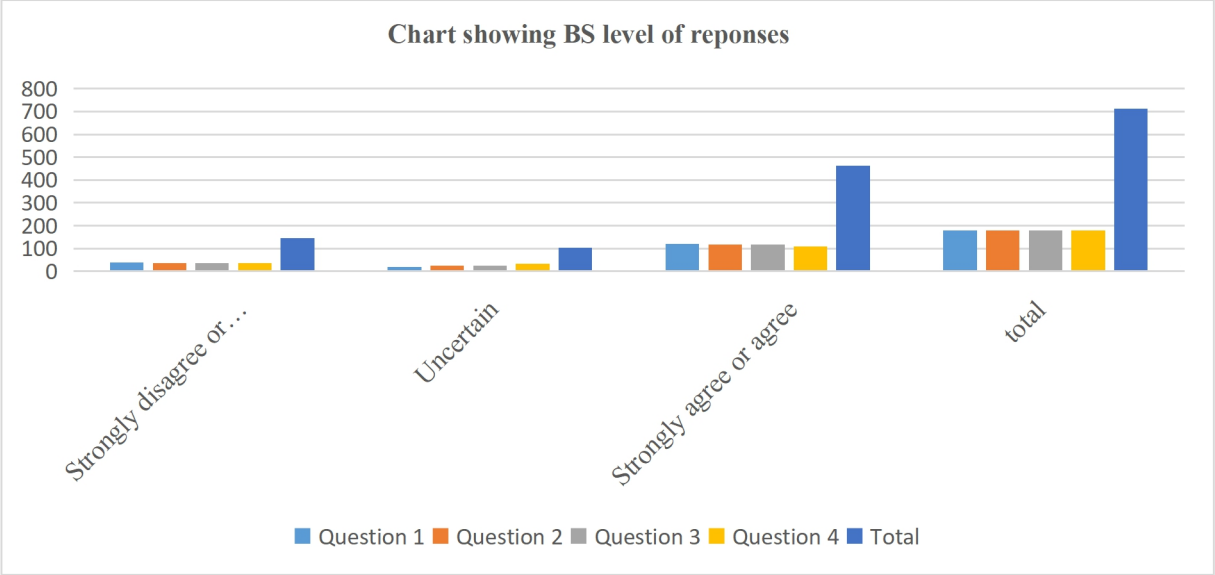

Figure 5.2. Chart showing the visual position of each question response category of business level strategy Source:Author's conducted survey, The role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

Appendix 5 continued

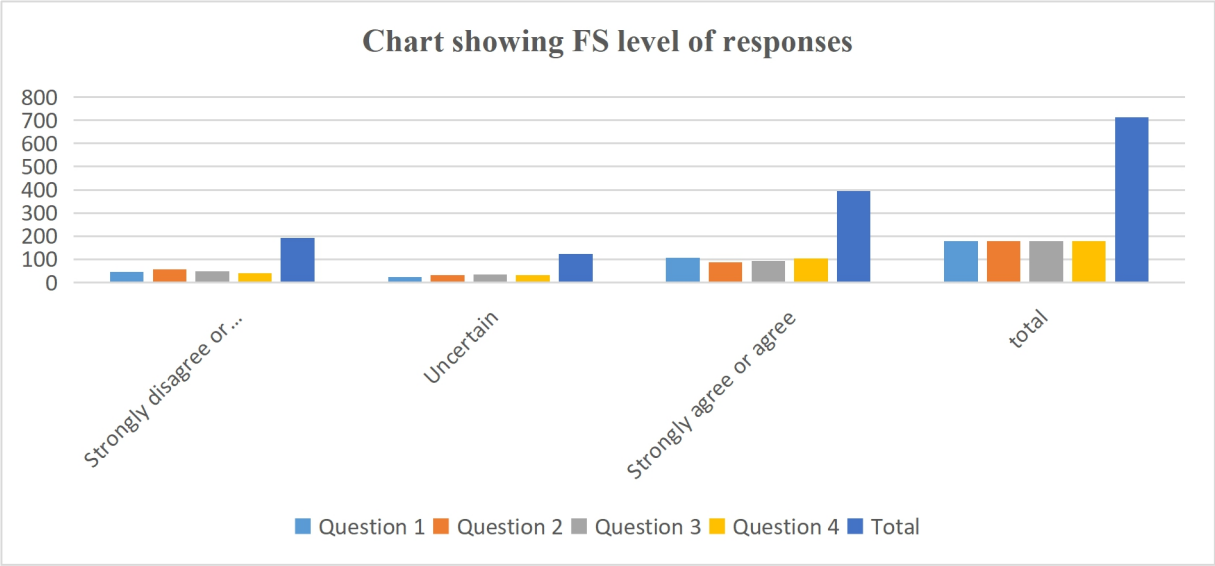

Figure 5.3. Chart showing the visual position of each question response category of functional Level strategy Source:Author's conducted survey, The role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

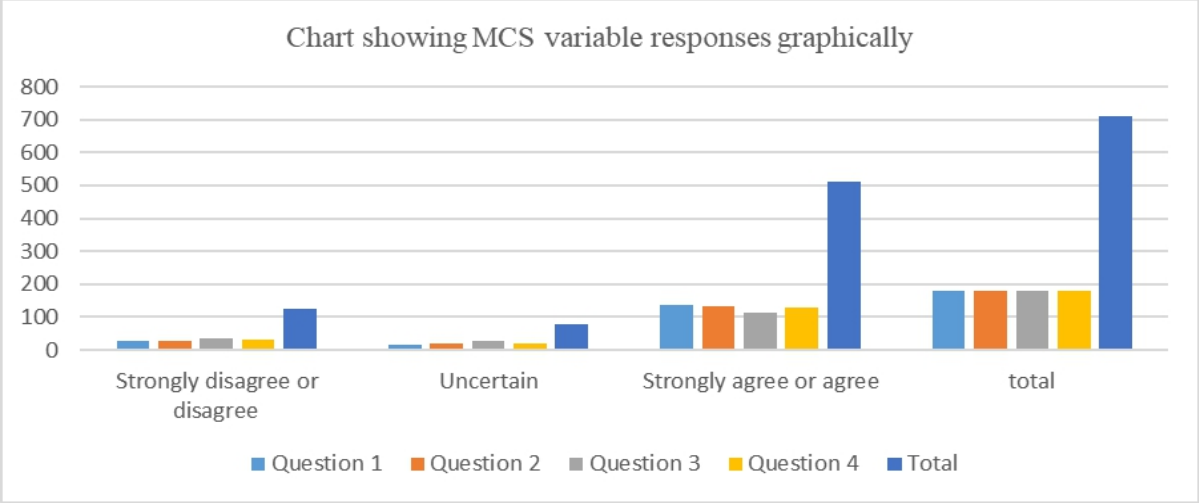

Figure 5.4. Chart showing the visual position of each question response category of management control system. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

Appendix 6. Pie chart showing demographic information.

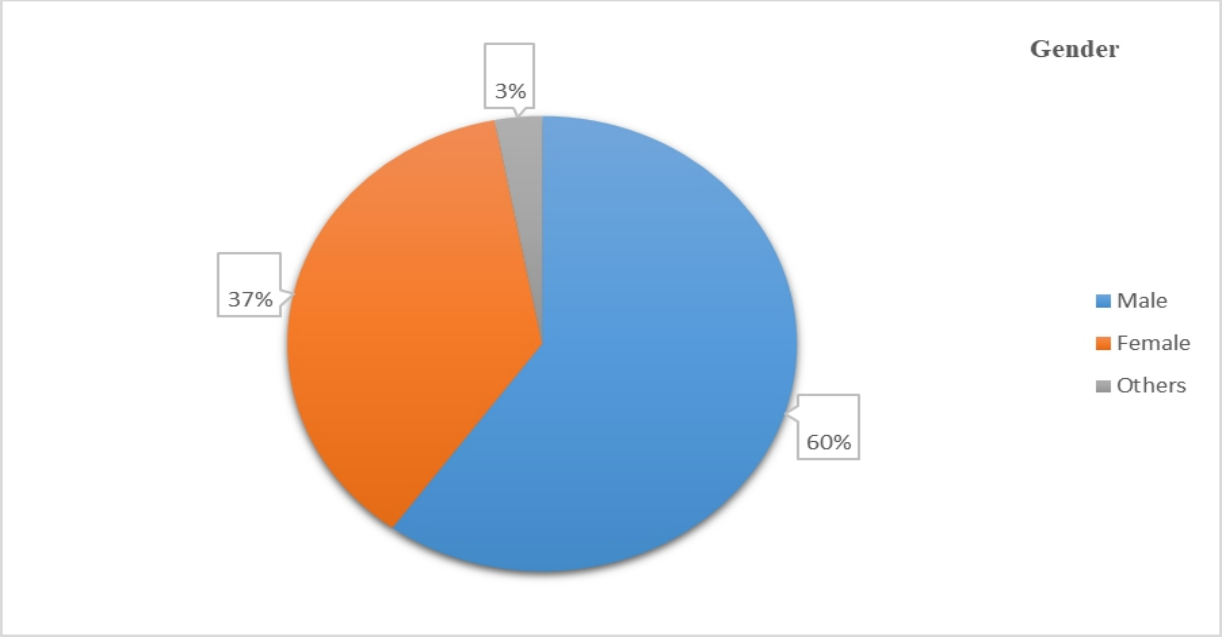

Figure 5.5. Pie chart of gender information. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

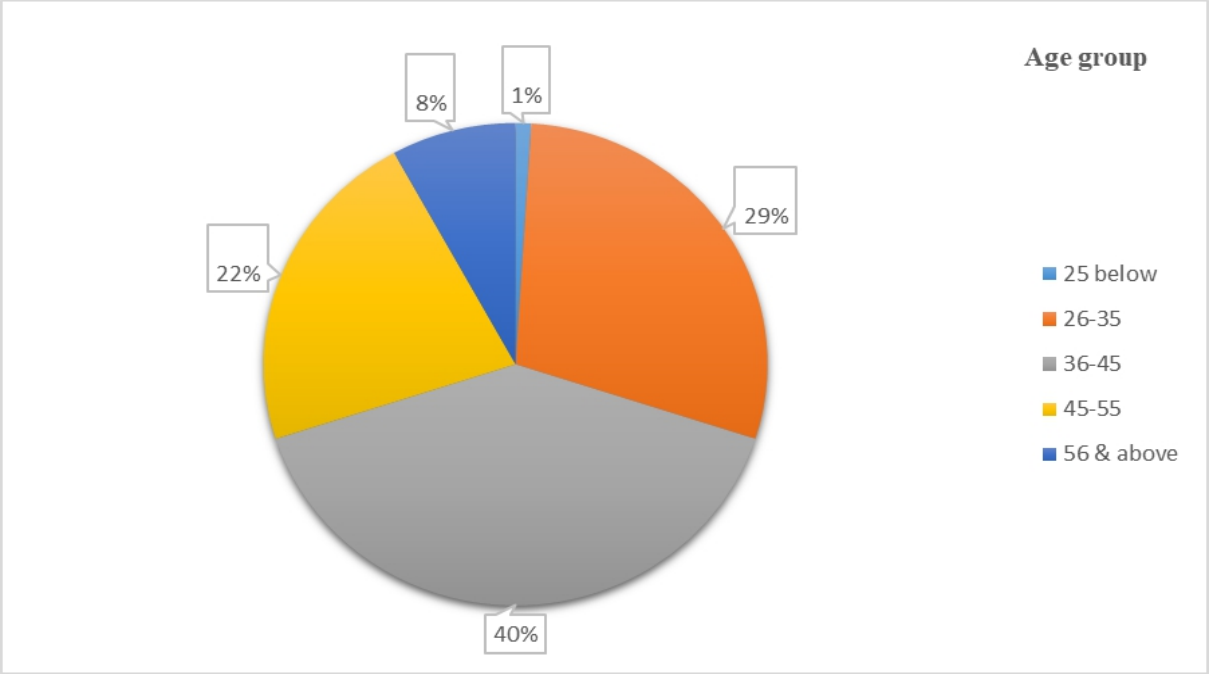

Figure 5.6. Pie chart of age group information. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

Appendix 6 continued

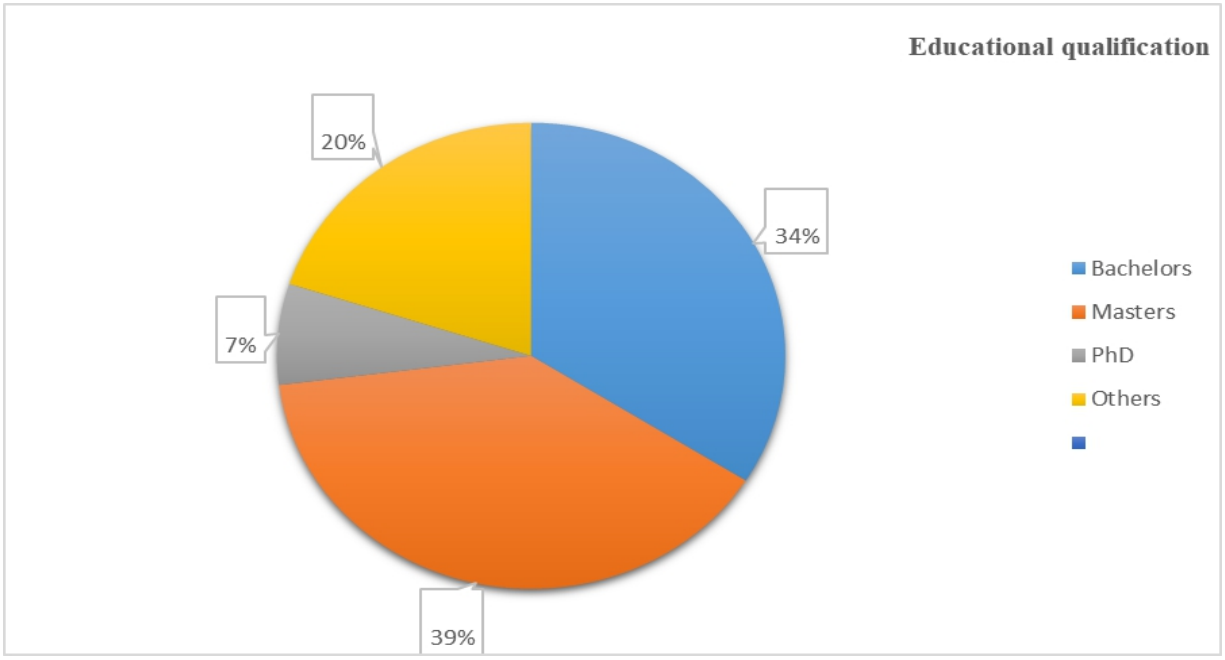

Figure 5.7. Pie chart of educational qualifications information. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

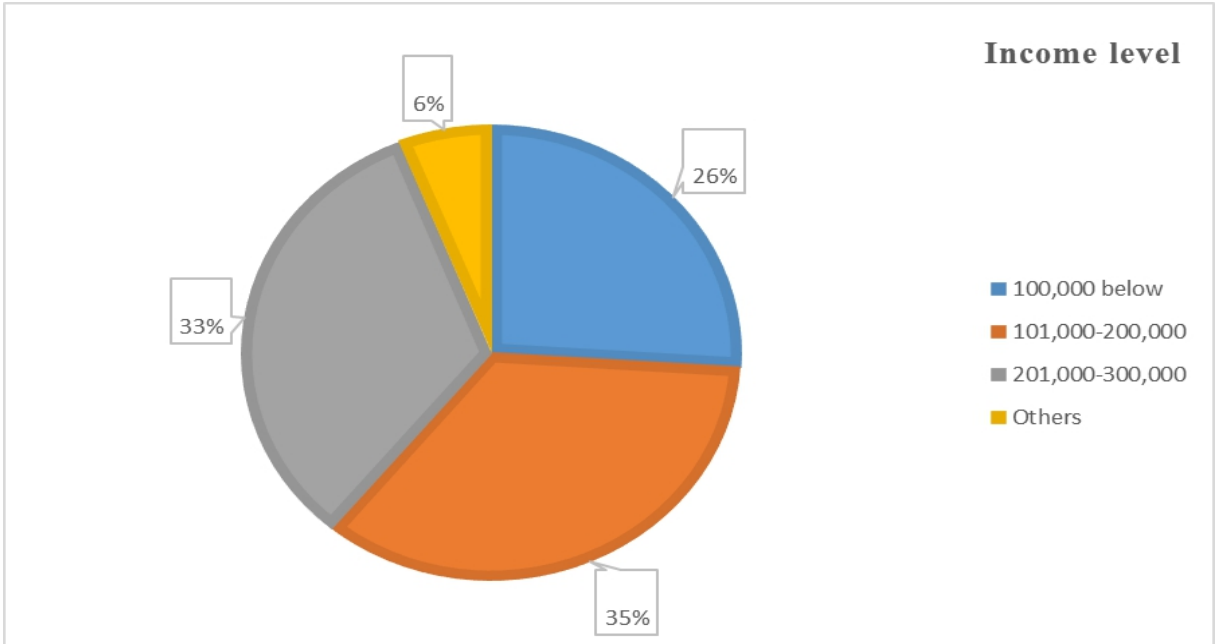

Figure 5.8.Pie chart of income level information. Source:Author's conducted survey, the role of MCS in FMN Plc corporate, business and functional levels strategy, 2021

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